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On October 25-26, 1968, 74 participants representing junior colleges in Texas met in a workshop in Austin to share ideas and experiences relative to the 1- and 2-year post-secondary curriculums for students in vocational office education. Major presentations included: (1) "Traits an Office Manager Longs For in an Employee," by C. Lester, (2) "Individualized Instruction and Procedures," by F. Carter, (3) "Problems in Teaching Students with a Language Barrier or Difficulty," by F. Brown, (4) "Problems in Teaching Students with Less Ability," by J. M. Hendrix, (5) "The U.S. Office of Education Taxonomy," by J. C. Linn, (6) "A College President Looks at Our Program and Instructors," by A. B. Martin, and (8) "Pardon...Your Image is Showing," by E. Filler. (DM)

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THIRD ANNUAL
FFICE OCCUPATIONS TEACHERS' CONFERENCE

Post-Secondary Vocational Education

(3rd,

6, 1968).

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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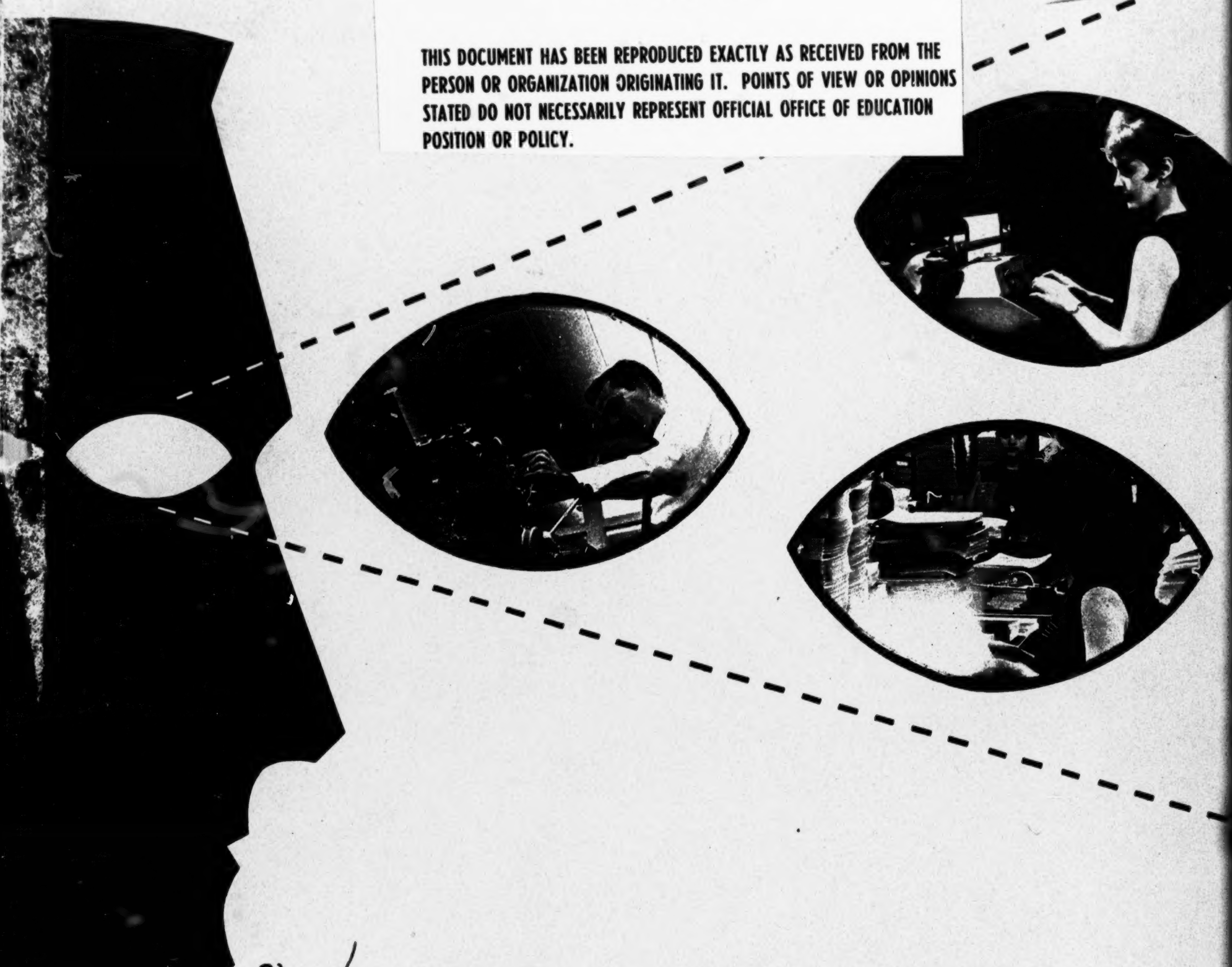

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A Challenge and A Choice

VILLA CAPRI MOTOR HOTEL
OCTOBER 25–26, 1968

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TEXAS EDUCATION AGENCY
AUSTIN, TEXAS

XPT 87150

PREFACE

On October 25-26, 1968, a number of office occupations instructors representing some of Texas' junior colleges met in a workshop in Austin to share ideas and experiences relative to the rapidly expanding one-year and two-year curriculums for students in the area of Vocational Office Education. The proceedings and considerations of this conference are contained in this report for your interest and information.

Gratefully acknowledged are the contributions of those who made formal presentations, as well as those who participated in committee work.

The work of this conference should serve as a springboard to the further development and refinement of the role of Vocational Office Education in the program of Texas' community junior colleges.

John R. Guemple
Assistant Commissioner for
Vocational and Adult Education

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OPENING REMARKS

Joseph D. Godsey, Director
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Good morning and welcome! It certainly is nice to see all of you. We have a very good program. Mr. D. W. Thomas has some of the outstanding speakers in this area here. I say this area, I am referring to the Vocational Office Education area, not the geographical area. I believe we will have one of our best seminars this year.

I want to talk for a minute about the expansion of Vocational Office Education at Post Secondary level. You may not be aware of the fact that the Office Occupations enrollments are second only to the overall grouping known as Technical Education. The enrollment is something over 11,000 for this year. I think the only reason it is not larger is simply because of the lack of funds for expansion. I am not going to talk too much about the shortage of funds this year. We are certainly hoping the money situation will be better next year. A lot of effort is going into it and the right people are working on it.

There is one little item that I want to mention. Mr. Thomas is handling this conference, and he will be visiting your schools in the capacity of the consultant in Office Occupations. His primary interest, however, is in the Mid-Management area.

Now this brings up a point. I just want to casually mention that Mr. John Guemple has given us another consultant's position in the Agency to strengthen the post-secondary program. This is a consultant position for Vocational Office Occupations. Currently the position is not filled. I just wanted to mention this so you could pass the information on to someone that you may know, in or out of state, who may be interested and ask them to submit an application to me. The position pays a little over $10,000 a year. The qualifications are the same for any consultant, a Master's Degree is required, and Mr. Guemple insists that the person have junior college experience. Of course, I agree with this because this position is a little different on the junior college level. I just mention that casually and I do not want anyone to accuse me of proselyting because I am not doing that.

Actually, I am here to introduce a personality that most of you are aware of, and I guarantee you that as time goes on, you are going to be more aware of him. It has been mentioned to me recently, by people both in and out of the Texas Education Agency, that there is a strong fresh breeze blowing through Vocational Education in Texas, and this I assure you is the result of the work of our new assistant commissioner; I say new, he has been here for over two years now, but it is still relatively new in an educational situation. It takes time to make changes and get your ideas working. I think you are going to be aware of the new emphasis that will be placed on Vocational Education at the Texas Education Agency in Austin. It is my pleasure to introduce our Assistant Commissioner for Vocational and Adult Education, Mr. John R. Guemple.

WELCOME

Presented by John R. Guemple, Assistant Commissioner for Vocational and Adult Education

Thank you, Mr. Godsey, Mr. Thomas. I don't know where to start, I've got so much I could tell you. I know there was a great feeling of dissatisfaction and unhappiness when we passed around the money this year. Since that time there has been kind of an undercurrent of excitement and a great deal of work, and I can say that the work didn't start this year. It started two years ago. We knew we needed more money this year when our request was forwarded to the Legislature for the Special Session this last summer. We asked for twice as much money as we received. At least we apprised the Legislature ahead of time that the funds were needed. We have been working for three years now trying to get an amendment to the 1963 Vocational Education Act, because there isn't enough money from Federal sources either. Last Wednesday, the President signed into law the amendment, and I have a copy here of the amendment with my little marginal notes. There is a great deal of excitement about it. It is law now, but they didn't increase our appropriations this year. Hopefully, we can look forward to next year with a great deal of anticipation. We may not get a dime more than we got this year; but, of the money that we do get, 25 percent is earmarked for junior colleges. The new law says post secondary, but it specifically mentions junior colleges. The preceding bill did not mention the junior colleges. Now it is not only mentioned but is given a great deal of prominence. There is another fund of money in here that has never appeared in a bill of ours before in that ten percent of that money must be spent on handicapped students. This means physically or mentally handicapped, emotionally handicapped, or people who have a handicapping condition under the law, which is important because we do have some programs in the State that have traditionally operated with our funds at the junior college level. Kilgore has a program in watch repair for crippled people who are not necessarily ambulatory--that means that many of them can't walk, they are in wheel chairs--and for the first time we have a fund of money that is earmarked and especially set aside for these handicapped students. One of the colleges in the State wants to start a program to teach piano tuning and piano repair to blind students, and we haven't had the money. Under this Act, we will have to spend ten percent of the money that we get in this State for instruction for these people. Even if we don't get any more money, that means there is one and a half million dollars which will have to be spent on the handicapped students. We are not spending anywhere close to that amount now, so some new programs will have to be developed next year for these students. I think there are a couple of exciting things here that (I see a couple of directors here)--some of you-- are going to have to go back and tell your president, your department heads, and the director or dean of your program about. In the new Act, Section 122, the first paragraph under sub-section A, paragraph 1, a new program sets up a whole new area of instruction, and I think this is going to have to be developed by the junior college. Let me read this short paragraph to you and then you will know why: "Vocational education programs for high school students, including programs which are designed to prepare them for advanced or highly skilled post-secondary vocational and technical education." Now, it seems to me that the junior colleges which are going to receive these students should assist the feeder school in the design of the program leading to post-secondary programs. It doesn't say technical education, it says vocational and technical education. "Advanced or highly skilled," which includes office occupations, all of the office occupations. So I feel with a relative degree of certainty that the junior college program in this State, even at Connally Tech, is going to keep getting very enlarged emphasis. This program is going to mushroom as it has in the last three years, so that from now on you won't even know what happened to you. The growth pattern around the United States is that 70 percent of the people enrolled in programs beyond the high school are enrolled in programs to learn how to get a job and keep it. By 1980, our junior colleges will have 100,000 enrollments and I think that is a very low estimate. Seventy percent means 70,000 full-time students will be enrolled in some form of occupational intent program. There are a couple of other changes in the law. One of them says that the programs which you have in your school must be designed because of an occupational objective, and programs to be offered are not necessarily transferable. That is a subtle change from the preceding Act and this came out of the clean bill. I don't know whether any of you had enough government to know about that; I didn't. I had some government courses, but they never told me what a clean bill meant. Clean bill means that it wipes out the existing law and rewrites it. This is a clean bill, a whole new look at vocational education, with high emphasis on post-secondary and junior college instruction. It says in effect that when your catalogue carries the designation, "not transferable," then your registrar made a mistake. The catalogue shouldn't say "not transferable" because the sending school never has the final say. It has always been the receiving school. If you will make a footnote to put your course content and all that in the catalogue, and somewhere in the front (you know where they have predental, prelaw, and all those other things), stick your occupational curricula in with a note at the bottom of the page and say: "This program has been designed to provide occupational skills. The courses are not necessarily transferable to any single institution." That will meet the requirements of the law and will also allow your students to search for any school which will accept the maximum number of those credits and attend that school and get a Baccalaureate Degree, a Master's Degree, or a Doctor's Degree.

Now the other thing which is exciting in here is that this bill was used as a vehicle. Nobody voted against this bill. They couldn't afford to politically. There were 11 votes against this bill in both Houses of the Legislature in Washington. Eleven votes out of some 535. Admittedly, some of the Legislators were out in the "boon docks" trying to get votes, but that is still a pretty good record. This bill amends the Higher Education Act of 1965, and it is a significant amendment.

Title II. The Higher Education Act of 1965 is amended by including the following new part at the end of Title V. It is called Part F--Training and

Development Program for Vocational Education Personnel. Now, this provides for grants to people with Baccalaureate Degrees who are seeking Master's or Doctor's Degrees as vocational educators, vocational guidance counselors, vocational teachers, and vocational administrators. The grant provides for the stipend that you normally get under any other Federal bill, and the institution of higher education can get a supplementary grant of up to $3,500 a year for the institutional cost so that they could forgive you of the tuition and anything else they would normally hold you responsible for in getting the grant because they have already been paid for their services. This also provides for an exchange program, in-service teacher education programs, all kinds of things. If I were you, I would immediately get busy when I get back home and start talking to the administration about the possibilities of entering into some kind of a consortium arrangement with the senior college. This money is not available now unless they rearrange or juggle some funds. Some of that is going on in Washington right now, because they don't want to wait a year to start all these new programs. They are trying to rejuggle some funds that are already in the Higher Education Act, but I would start working right now on my administration to get in with two or three other junior colleges or all of the junior colleges, and start encouraging the senior institutions in your area to offer Master's Degree or Doctor's Degree level work in your subject matter field for junior college or other levels for vocational teachers, because we have a great need in this State for leadership. Texas does not have enough teacher trainers in its senior colleges with Doctor's Degrees in vocational education. We do not have Doctor's Degree holders in key positions in the junior college system, or in the public school system. We do not have Doctor's Degree programs except in Agriculture and Homemaking. I am sorry, but that is just not right. Now we have what we used to call a sugar stick to hold out to the senior colleges. Under the new law, you can write the Commissioner of Education in Washington and get a grant to finance a program, at least for the first two years if you will start it, and these grants are available to students for up to three years of study beyond the Baccalaureate Degree. "Well," you say, "that isn't enough, unless there are lots of deficiencies for a Doctor's Degree." Normally, that is enough.

The other thing I want to talk to you about for just a minute is the new financing pattern. I'm saying this frequently and loudly. The Texas Education Agency, the Coordinating Board for High Education, all these people that you see leading in these workshops are State employees. The Comptroller of the State of Texas signs our checks. There is a specific prohibition in the law for any of us to work on the Legislature and try to influence their vote. However, we can put forward a recommendation as an Agency. The State Board of Education, for whom I work, presented a recommendation to the Legislature. It will have some changes before the State Board is satisfied with it. The Legislature can either accept, change, or reject totally the recommendation. The recommendation is that the junior college program currently financed at the level of $16,000,000 next year, and $18-1/2 million the year after that. All this money is to be appropriated out of the State Revenue so that we are not dependent on

Federal dollars. If something happens, Viet Nam blows up in our faces and all the Federal funds stop, the programs will still be financed. We will still have teachers; we will still have students; we will still have equipment; we will still be operating! Now, that is the recommendation based on a whole new way of financing the junior college program. That is, we said in affect and to the Legislature, that we believe a fair and equitable formula based on the number of students and the number of hours of work should be devised and be the method of financing, based on cost. How much does it cost the junior college to teach the students. It is not so difficult to work up a formula based on the number of students which you have in your classes and the number of hours that you teach. Using those two criteria, you go to the Southern Association and pick up their terminology, student contact hours or student class hours. We use student contact hours because a lot of our students are used some part of the day in on-the-job training and the teacher has the responsibility to follow them into this training situation. Several of our programs have this procedure. Some of you have co-op students who work part of the day as designed as part of the instructional program. The teacher has a continuing responsibility, even after the student leaves the classroom. We say student contact hours are the number of students multiplied by the number of hours the teacher is facing or in touch with that student. All right, based on the number of student contact hours and the cost of instruction, including updating the equipment when it needs to be updated, the supplies that are normally used up in the process of instruction, books for the library, and we are all short there, based on the actual cost--the cost applied to formula, and then projected, so that the money follows the student--the more students you have, the more money you get; the more books in the library, you can afford the better equipment that you can keep up; the more teachers that you can pay, or you can pay him better anyway, let us put it that way. I think every teacher here is underpaid. I think every teacher in the State is underpaid as far as the actual workload is concerned. Now, basically, what we are saying then is this new pattern of financing should be the one. I've got news for you. Most of our junior colleges are not on a cost accounting basis by division or by program, or even by building. So we can't isolate all the costs. We asked the Junior College Association through an advisory committee to work with us in devising the initial formula, which they did. It is their formula, not ours. Then we used that formula and made the computations based on the number of students that were projected to be enrolled in the program this fall. Now we hope to have accurate data on the number actually enrolled and can update that document before it gets enacted by the Legislature, so that instead of 16-1/2 million dollars next year, it may need to be $18,000,000; we don't know. As soon as we get accurate data on the number of students that are actually enrolled, we will inject that into the formula and say, "Now, this is the amount of money that needs to be appropriated to each institution," and we will draw the rules and they can tell us how they want to spend it. We will give it to them in one lump and they can spend it that way. This is an improvement in the way of financing the program. The idea was ours. In fact, the idea was mine in 1962 at Lee College, when I was a local director there. Why can't we have a formula similar to the academic program that recognized the subtle difference between the cost of one program and another? All of us realize that our program here--the Office Education Program--is a little more expensive than Licensed Vocational Nursing. That should be recognized in the formula. A Technical Education Program that requires expensive equipment is more expensive than an Office Education Program. That is all right, just as long as we recognize the cost difference and recognize the fact that it is desirable to have highly qualified teachers, experienced teachers and we are able to pay them enough to keep them. Those are the important factors. So we have put forward this idea. The basic idea, which was our major concern, has been accepted by both the Legislative Budget Bureau and the Governor's Budget Office as the right way to do it. When we get our appropriation, we may get directions from the Legislature to set up a separate account for this money and how it is spent, and to be able to tell the Legislature, when they meet two years from now, that that was not enough. We found that this is more expensive and this is less expensive; so, if you will adjust the formula, we will have the right amount of money. It is just a matter of what the formula will be and how adequately financed your program will be. We, in this State, are emerging from a developmental period in the education program in the junior college, community college, and technical insitutute to a new era. In that developmental period we were pouring money in. We didn't have any experience and the money was there. It wasn't needed for anything else, so, we just said, "Well, all right, this is high priority." We must have sound and strong junior college programs; now let's develop them; here is the money; let's give it to them. Until this year we had enough money for most people that asked for money. We knew ahead of time that the money wouldn't be available this year; so we asked for it from the Legislature. But they did not appropriate it. All right, next year, we have a completely different year and a different request. We feel that the idea is acceptable, so now we are going to go with it.

That is basically what I came to tell you; it is a whole new ball game! We have all kinds of people interested in this. Some of the Legislators have been on your campus; if they haven't, it's your fault. Any State Legislator in your district should be invited to look at your program. Show him the kind of work you are doing with the students and employers and the kind of placement that you are having from your program. Get him interested, and asking questions. How much money do they make? How many of your students are going to work? What are they doing? Where are they working?

I cannot, and the staff cannot, influence the Legislator's vote. You can, your administration can, and your advisory committee can. I think all of you understand that any area vocational school--most of the junior colleges are area vocational schools--are required by State regulations to have an advisory committee. I think the right approach is through the advisory committee, and if it is the right kind of advisory committee, they can influence the Legislature as a whole, too. The people should be informed, they should be talking with the Legislature about this proposal, about what you are doing with the money. When you really come right down to it, a cost analysis isn't going to do us any good. That is not what we are really talking about, how much it costs. Are we? What we really, in essence, are talking about is: what are the needs of the students who are enrolled in the program, what are we able to do for them, and can they then become productive members of society? If they can, the program is a success and worth whatever it costs. Well, I could talk another three or four hours about this, but I won't.

Basically, what we have said is that we want to finance the programs that exist now out of State money, which would reserve the Federal money for new programs. Then we could crank into the program, your school, new money for the vocational programs that you want to set up. The new Federal money would buy the capital equipment and probably the facilities, if you don't have them. (We don't know yet how it is going to work.) Perhaps it would finance the first year of instruction on some basis. Now, I am not reading this just to anybody, but there is something new in this law that I haven't told you about. I don't know how it is going to work, but it is going to lay a lot of responsibility on the school and a lot of responsibility on the State. Now listen to this: "No local education agency which is making a reasonable tax effort will be denied funds for the establishment of a new vocational education program solely because the local education agency is unable to pay the non-Federal share of the cost of such new programs." I think the State money will finance the ongoing program after it gets started; and we will use the Federal money, probably in "startups." In addition, we suggested to the Legislature that there should be a contingency fund over and above the amount appropriated to each of the insitutions for the ongoing program for unanticipated program growth. If you grow more than 15 percent in a given year, we haven't taken that into consideration. We do have a contingency fund of a million and a quarter for the first year, and a million and a half for the second year. We have allowed for growth also in our appropriation requests. We have taken care of a six percent increase in costs each year of the biennium and a 15 percent increase in program enrollment each year of the biennium. In other words, the amount of money will be 21 percent more money than the first year for each school. The first year is 21 percent more than the actual request of the schools this year, and there is the contingency fund for those institutions that are growing more rapidly than the norm for the State. That is all we could do this year, we hope next year we will have better data.

I wish you well on your workshop. I think you are going to have a good meeting. I hope some of the program personalities will have a great deal of help for you in assisting you to improve your program, and I hope you take seriously the charge I laid on you, to get with your administration, your advisory committee, and your Legislators. So, let us be sure that when the appropriation bill does come out of the Senate and House, there is enough money for your program to achieve its goals, which are better educational opportunities for all of the out-of-school youth and adults in Texas and a chance at a good job, with good training behind them.

All I'm saying is, this is a whole new look, there's a great deal of interest. I think there is real hope for next year. But I don't hold on to any hope for any more money this year. Now, we may, in fact, get a few more dollars this year. But it will be darn few, if any. And I don't really expect to get a dime more this year. We are underfinanced, I know that. We told the Legislature that we were going to be underfinanced unless they did something significant. They failed to go all the way with it. They gave us a hundred percent increase over last year's out-of-state money, but we asked for a 300 percent increase. And we didn't get it. The only answer I can give you is that the appropriation bill was signed into law by the President before this bill was signed. Of course, you know, it is against the constitution to have an ex post facto law, so the appropriation bill cannot be applied to this law, unless budget adjustments are made in other laws to add additional funds to the unappropriated titles in this one. And they are trying to do some of that. But it will be awful little, because they underfinanced everything else,ttoo.

Thank you.

TRAITS AN OFFICE MANAGER LONGS FOR IN AN EMPLOYEE

Presented by Mr. Carter Lester, Head of Operations
Scientific Methods, Incorporated

Trustworthy, bright, cheerful, punctual, dependable, neat, mature, logical, interested, loyal, stable, creative, even-tempered, optimistic, organized, and motivated, and sincere and worthy. As I read over this title of the subject that I was assigned, I really began to wonder what else I could say besides that. I began to dig into why a subject such as this was assigned. But, of course, it becomes obvious that you are as forward in your field by always looking for a better way to do your job, and these things are obvious. When you read the title, you knew what I was going to say before I said them. But I think that you were just hoping that there would be an outside chance that this character whom you never heard of would give you some clue to a method that you could impart to your students so they could acquire these traits after they acquire the talents and skills in the classroom. And I am going to have to report to you that I don't know of any way to identify these things. I truly don't. Now, we can test for the talents that are needed for the accounting department, for the marketing department, with research, or in the secretarial skills; but how do you know if the people have these other things that are so necessary to be successful?

I had a very interesting experience a couple of years ago. I noticed in looking at your program, that IBM furnished coffee; and they are salesmen, and they sold a company that I was with a work processing center. If you are not familiar with a work processing center, it is not a typing pool, it is not a secretarial pool, it is a work processing center. They sold us this concept, and we bought it, hook, line, and sinker, and were grateful that we did, because at that time--it was about two and one-half years ago--we initiated the program, the cost of putting out a letter, an individual letter, about one page long, was I believe about $2.46 per letter. By going this route, we reduced that amount to about $.90 a letter, and saved over $100,000 the first year. So, we decided to go the work processing center; and we were going to use in this work processing center, not typists, but secretaries. They were going to be classified as the "Executive Secretaries." We set up the skills that we needed in there, and we wanted at least 75 words a minute typing with very few errors. We wanted the girls to be able to put out work that was grammatically correct--spell it right--and we wanted them to be able to work with these IBM--MTST machines that look pretty complicated. We set up a test for them, and we had eight positions to fill. We decided in the beginning that we're going to tell the people what we want. if they think they have those skills, come on in, we don't care what they look like, we want to see if they have got the skills. So, to find eight people, we interviewed over 110 and tested over 70 to get those eight.

One course that is always forgotten, I think, forward down the line, is a dictating course. Because in the present company I am with, Scientific Methods, Incorporated, we have some very highly educated people and you will have Master's Degrees, and you will have Ph.D Degrees, but they are the sorriest dictators in the world. They can't spell, they can't punctuate.

So, we put the burden on the Work Processing Center. We'll dictate it in, you get the output that is acceptable. If I word a phrase badly, I want you to correct it. If I'm stupid enough to try to punctuate it, and I do it wrong, you're supposed to correct it. My question is, we go through the test, and the girl can type 75 words a minute, and we give her a hundred-word spelling test, and she makes the required 90 on it. We send her down to IBM to take the aptitude test, and she does well. We give her our test that is for logic and thinking ability, and so forth, and she does well on it. But I've got two of them. I've got one position to fill, and I have two secretaries, applicants, and they both make the same grades. Which one would you choose? You are looking at this long list of the things that you would like to have, and how can you ascertain which one of these young ladies will have those skills? Well, you pick the one with the blue eyes or the one with the brown hair.

I don't know, and yet I do know, that I am looking for the same type of thing that you look for in your students. You can't write it down on paper, and yet you know after visiting with those people and working with them; you know it is an eagerness; it is a willingness; it is an outlook on life; it is almost indefinable. But, you can't judge by appearance, by the way they comb their hair, by the way they dress. There has to be something deeper in that category of separating these people. Two folks came in. One was Delores, a little Latin American girl, who had been a VOE student, by the way. She had been out of high school about nine months, and could not get a job. It was rather obvious as to why she couldn't; she was from a family of a very low income level, her hair was long and stringy, her clothes didn't fit as well as they should, and were, perhaps, a little too loud in color. But, she knew when she walked in that door, that she was going to be expected to do 75 words a minute on her typewriter with great accuracy, and that she was to be a good speller, and a good punctuator. She felt like she had these skills, so we said okay, we'll try, but we really didn't think it would amount to much. So, sure enough, she did 76 words a minute, she made 93 on her spelling test. She had a lot of mechanical ability, and in the aptitude test she scored well. There was no reason for us not to put her to work, just because she was right out of high school and had no work experience. So we put Delores to work, and we were always grateful that we did, because she turned out to be one of the top flight secretaries in that pool. When she began to earn money, her appearance improved, and she began to sharpen up. The company thought so much of her, they sent her to night school out at the University to sharpen up her Spanish skills, and got her a Spanish element from IBM so she could answer the letters that came in from South America.

We had another young lady who came in, whose name was Barbara, and Barbara was a young Negro girl. We had not in our company, at that time, hired any Negroes beyond mail clerks, or custodians, and so forth. We stopped our policy, and Barbara got on that typewriter, and the thing just hummed.

You could alsmost see it smoking. She did over 80 words a minute, and she made 96 on the spelling test. On down the line, everything was good; so we put Barbara in our Work Processing Center. She turned out to be the leading producer in that center. You can't tell by appearances. You've got to do your testing, and then you have to fly by the seat of your pants.

A young lady named Linda came in, right out of high school, and beautiful Linda was not. She was a small girl, with great big glasses, skinny, she was so skinny, I just couldn't draw her out at all. But something about her impressed us. So we decided to give her a chance. We put her in the department, and in the most menial job, I guess, we had in the department, which was mail clerk. She had a difficult job. In the mornings, about 8:10, the mail came for that department which had about 50 people in it. Her job was to take the mail, sort it, and deliver it to the people in the department. A low-grade idiot could do this job. So we gave Linda the job, and she took gratefully, willingly, and enthusiastically. That was a department that we promoted out of. They developed skills that we needed in other departments in that building, and there was a lot of opportunity in there. It wasn't very many months before she was assigned additional responsibility which she took enthusiastically and willingly; and we began to give her more responsibility. Pretty soon, it became a challenge for the department manager to give her a job that she could not do. At the last time I talked to him, he had not been able to do this, yet. She drew and accepted this responsibility.

So Delores, Barbara, and Linda . . . maybe there's a clue there for us, I don't know. It is something that they had; it is a quiet dignity, a confidence, a general outlook on life. I am of this opinion, if the people that you send out in the workaday world, that they all have the traits we are looking for. It is the responsibility of the management to provide the environment and leadership and the training, and the right culture in which they can operate and grow. If management provides that culture, they are going to have these traits. Let me give you one quick example. Let's take a girl named Abby that you have in your school. Back in high school, Abby began to decide what she wanted to do. After good counseling and testing, she decided she wanted to go into the accounting field. She was good with figures, she had a good logical mind, she liked to see things neat and orderly. So she chose this field, and she is off to school for a couple of years. She is the kind of student that you love to have. Bright, cheerful, eager, she is willing, and she is a pure delight to have around. So, you turn her loose in the cold, hard world of business, and she begins to go around knocking doors, putting in her application; and she ends up at SMI--our company, Scientific Methods, Incorporated. And we see the same things that you saw. We test her and she's qualified for this job. She has the aptitudes. We put her to work in our Accounting Department. Everything is great. She comes five or ten minutes early every morning. She sits at her desk, working, she has been given the job of handling the invoices. She relaxes at coffee break, but doesn't take long, comes back, and many times she brings her lunch--because she is so interested in her job. She would just like to eat her lunch, sit down, and get back to it. She never knows when five o'clock comes. She looks up and says, "Is the day over already?" And then, in a couple of months, you see a change. She is on time, but she is barely there at eight o'clock. Before she can go to work, of course, she has got to go to the Ladies' Room, and comb her hair, and spray it with the stuff that they spray. She stops by the coffee machine on the way back, visits with some people, and it is 8:15 or 8:20 before she gets to work. At coffee break time, instead of 15 or 20 minutes, she drags back 25 or 30 minutes later. Her lunch hour is long. Comes close to five o'clock, you see her head going up to look at that clock. At five minutes to five, her desk is clear, and at five o'clock she is just out of the building. Then you notice on her attendance record, there are more and more days when she calls in ill. She is absent more and more days. Well, in a large company, a director of personnel or an administrator starts looking at this record and draws an obvious conclusion. For someone to start acting like this, they are getting ready to quit--or you are getting ready to terminate them. Now, a smart administrator, instead of just saying, well, here is another one, and getting rid of them, will ask why is this happening. Why would such a good prospect turn out to be so bad? There has to be a reason for it.

Let's go back and see what happened to Abby when she came into this company. She was eager; and she was excited, she was starting her career. She was given the job of invoicing. The company ships material all over the world. It was her job to take the invoices, calculate the price of materials, add the prepayment charges for freight, and send it out to the client. She has been doing this for several weeks; and the chief accountant, her boss, comes in one day. He says, "Abby, you are not getting those invoices out fast enough. Now, I want you to do whatever you have to do; but get them out on time." And Abby says, "But, Mister--." "Don't 'But Mister' me, you heard me what I said, you get them out." "But, I just wanted to ask you--." "Don't ask questions, now, young lady, one thing you have got to learn in the business world, is that you don't ask questions. You do what I tell you to do, because I am the boss and you are the subordinate; and that is all you need to know." Well, the invoices go out later and later. Their account goes up. The manager calls in the chief accountant and says, "Look, friend, we are on a real simple bookkeeping system. We close out every month; we take the money that comes in; we take the money that is paid out, and subtract it; and there is our profit. Now we can't collect that money until you get the invoices out, and you are not sending the invoices out on time; now what is the matter?" And the chief accountant says, "Well, it's that new girl you hired for me. She is no good; she makes mistakes; she is just like everybody else; she just wants to draw her pay and go on home." Well, the administrator will ask "Why." So, he says to the chief accountant, "Bobby, do you mind if I talk to this young lady?"

So, the sharp administrator calls her in, talks to her, and begins to draw her out. And here is what happened. She has to send out those invoices and she has maybe a hundred sets of phase 1 at $81.50 a set, and she can figure that out. But, the duties of her job also call for her putting those freight charges on there. These shipments are being sent out all over the world. And many times the client will request that they be sent by air freight. So he is using Emory Air Freight. Emory Air Freight picks it up at our office, they do whatever they have to do to get it on the airplane, and they go to New York. Emory Air Freight arranges it to go into London. But, because it is not being sent "Free Domicile" they have to turn it over to an English carrier. And the English carrier has to take the shipments, get the clearance, and pay the trusting duty, and deliver it to the client. Then, the English carrier has to get their charges together, sends them back to Emory Air Freight, Emory Air Freight gets those together, and sends them back to us. And, it is taking anywhere from four to eight weeks. And, we are waiting to send an invoice out. And we can't get our money until we send the invoice out. Well, Abby being a sharp girl, has gone down to the Shipping Department and found out all this. When Mr. Chief Accountant came in and told her to do this faster, she was all ready to tell him why she couldn't do it any faster. She didn't have the shipping charges. But he wouldn't listen to her. He is thinking, there is a knot-headed idiot, that is no good, that is working until she can get married. She doesn't know anything, anyway, and he would not listen to her simple explanation.

Well, I come back again, it is the responsibility of the management to operate your company in such a way that the lines of communication are open all the way up and down the line. And, if he had listened to her, they would have solved the problems. Just exactly what we did, by the way, we started sending them collect. We told our clients, and the clients were complaining because they said, look, we get our merchandise, but you don't invoice us, we've got to keep our books open until these come in. It is causing a great deal of inconvenience. So, we began to get into the problem, and we say, write the clients that we are going to change this, we are going to have the carrier bill you direct for them, and we will send our invoice immediately. Our accounts receivable dropped about $100,000 in about three weeks. So, one point that we can draw from this, is to get the people involved, and to get them committed. Now, what we could have done back when Abby started coming in late, we could have said, okay, everybody is coming in late, let's put up time clocks. That will make them get here on time. And it would have. It would make them get there on time to put in time clocks. But you can't devise a system that the people cannot beat later in the day if they want to. Now, that is just a fact. I am not saying that time clocks are bad. But, if you have 15,000 people reporting in a plant, you may need a time clock for five different kinds of people, so that you can gauge their time and pay them by it. But time clocks are not always the answer. Get them involved. Get them interested. Open the paths of communication.

Real quickly, this is the lesson I learned back when I was going to school and I was working for a newspaper as a district manager, and I had a certain section of Austin here. We would start and go put all the papers on the porch. And this was great. So, the thing to do was divide the routes into small routes of about a hundred, and find a boy that lived on the route, these were morning routes, deliver them right to their porch so the boy wouldn't wait out in the cold, and the easiest way to do it, was to get up, put the papers in the bag, walk the route, and fold the papers as you go. Now, you get any teenage boy, and leave him by himself, and what he is going to do, he is going to haul those papers in the living room, he is going to sit there and roll them up first, put rubber bands around them, and then he is going to get on his bicycle and start throwing them any direction in the world. It is much faster to put the papers in the bag, and roll them as you go along. I've won many, many bets from boys on that. But, I went out and walked every route, thirty routes, and found the best way to walk those routes. You put a thirteen year old boy on that route that is doing it day after day, and come back in two or three weeks, and he has found a better and a shorter way to walk that route than you could show him. And, this is so true way up and down the line, in a corporation or a company. The people that are on down the line know what is going on. They have some valuable contributions that they can make. If you will just open up the lines of communication. So, that is what we have got to do. I will just end with this point. That I believe that people are basically good. People are.

INDIVIDUALIZED INSTRUCTION AND PROCEDURES

Presented by Dr. Fairchild H. Carter
Business Education Department
North Texas State University

Vocational education is respectable and not a substitute offering to an audience which was unable to perform in a general education subject . . . vocational education is not in conflict with general education--it is an adjunct to it, and no reputable vocational education specialist will attempt to convince you that a program of instruction can be built upon other than conventional bases of tool subjects which are needed by all--reading, writing, and arithmetic--reading, communication skills, language arts, computational skills--however they are designated. If you aren't in vocational education--office occupations, specifically--by choice, you probably aren't as enthusiastic about your task as some of the personnel you are instructing are about theirs. On the other hand, you may be, and one of the values of vocational experience is the possibility that, at the earliest possible moment, the student recognizes he has made the incorrect career choice, for him, and that he should change or at least consider the possibility of changing to some other field. Vocational education is for anyone who can profit from, needs, and wants instruction which will make him occupationally competent . . . and that includes your children and mine--it is not a second-rate program for a second-class educational citizen. On the junior college level it should serve an audience which has been identified for the level of occupational served by the post-secondary educational program and not a re-offering of a program which should have served the students at a lower grade level. Articulation with high school programs and meaningful testing programs to identify the competencies and status of the students who are entering into or transferring into a system are, or at least should be, early mandates for planners of systematic programs of occupational education for the office . . . and that is what individualized instruction is all about.

Whether you are operating a cooperative program or one which is providing the application in a laboratory situation, the heart of the program is the classroom instruction. The reason for using a downtown laboratory is that it can provide some experiences because of equipment or instructors which you cannot provide so well in the school. Half a boat will not sink alone, though, and it is the school which bears the brunt of any deficiency and also has the responsibility and authority to provide the program regardless of the situation. Cooperative methodology is not new--it has been applied in some fields for more than 60 years, and some of us were operating office cooperative programs more than 20 years ago. The renewed emphasis on vocational office occupations and the expansion of the audiences served under the emerging philosophy have tended to equate vocationality with reimbursability, and they are not necessarily identical. Some really fine vocational education has occurred without any reimbursement.

INDIVIDUALIZED INSTRUCTION AND PROCEDURES

What is the concern about the appropriateness of individualization of instruction. Sometime, someplace, somebody has to teach a task if that is the requirement of the occupation. Whether it is the job of the school or the job of the employer seems to be the point of debate. Opinions of experts seem to indicate that all situations are not identical and that what is appropriate in one situation is not appropriate in another. That, then means new emphasis on the teaching for transfer and that should not be new to any of us. However, moving from inductive to deductive to inductive reasoning may be more essential than ever as the challenge of occupational education expands.

Individualization of instruction is not unique to any vocational field. It is as difficult to achieve for the veterans in the field as it is to the newcomers. The reason? Our entire society is dynamic--not static--new subject matter is required daily. The pupils in the high schools and colleges today will be employed in the businesses of the World--or the Universe--as middle-aged citizens at the beginning of the twenty-first century. They will have learned and discarded skills and facts and replaced them with better ones, maybe several times over, by then. Our students in their productive lifetimes, whatever their fields, will learn facts and perform tasks which do not even exist today. Much of this will be learned in individualized instruction and in ways which are not those of the conventional systems we know today, but this should be expected as all aspects of the society should grow.

Don't let the individualization of instruction become a Frankenstein monster committed to your destruction. As valuable and meaningful as it is, it must be your servant and not your master. You need not start it the first day of school and provide it for every day during the year for every student or run the risk of self-condemnation. What is someone's system may not be appropriate for you. The press of individualization of instruction has to come from a need.

This visual is adapted from Edgar Dale's cone of Experiences. If you start at the top, you'll see the lectures on vocation; and then you discuss with them job information, you show them some vocational film, you visit some businesses and industrial exhibits, you even visit some places of employment, where they actually see the job done. You study a lot of the related and technical information that is available to you, and probably the best sources of it are the places where your youngsters are employed, if you're on a co-op program, or from your trade associations and industry, and business, and agricultural organizations that can give you an assist on the resources that you need for the real individualization of instruction.

We give them instruction in pre-employment skills and knowledge. If they find out here, that this isn't their career intention, it still might be the most valuable experience that that youngster every had.

And, then, finally appears direct, purposeful, on-the-job experience. Whether it's psuedo--whether it's in-school production, whether it's co-op, whatever it is, this is the thing that we really talk about when we get down to individualization of vocational education, whatever the field might be. I want to talk to you about related instruction--a concept of task and cluster relationships. Then I want to talk to you about some of the most effective teaching devices as they are seen by good practitioners, some suggestions by graduates for individualizing instruction, and these are from graduates of business and distributive education programs in the nation. If you take a look at this center, that's general education, that's reading, writing, arithmetic, the universal set everybody has. In college, it's the social studies, government, the American institutions, the language, the culture; whatever it is, they become the universals at whatever level we happen to be educated. As you move outside of that, you have some things needed in a general related area--in typewriting, in shorthand, they are the basic skills that make a competent beginning practitioner of whatever it happens to be. It also includes the components of special experience in the business world, of deductions that are made in the payroll, and what's done with it, your financial responsibility for tax obligations, the kind of things that you are obligated to do just because you are a member of society. You drive down the right side of the road, the kind of things you need to know, for instance about unions--unions are a way of life. You don't have to like them, you don't have to dislike them, you just have to recognize that these exist. Well, these aren't part of the basic tool subjects for everybody, but they are an involvement area for everybody who is in business.

You move outside of this small center of all the universals into the general related. Then you move into the things which I think are the significant parts for individualized instruction. It is a nebulous kind of thing to begin. We take a task here, a task here, and a task here, and we take all of these tasks. We could go on, and if you would rather not have them in the circle, I put them down here on a continuum from learning the keyboards, from keypunch, from basic filing, from taking dictation, shorthand theory, machine transcription, pedal operation of equipment. Each of these kinds of things is a task. Each of them can be taught on a job analysis basis by itself. Then, depending upon the kind of person you want to emerge from here, what kind of marketable solution you find for this person, you take a combination of tasks and make that into the cluster that fits into an appropriate situation. You have an infinite variety of tasks, you have again an infinite variety of possibilities of combinations that these people can use, based upon good individualized instruction. When some employer says, "Just give me a smart young girl, I'll make a secretary out of her," we should respond, "How long do you want to wait before you start giving her dictation?" I think this answers a lot. The smart young girl, or boy; sometime, someplace, somebody, has to teach her or him that task. It may be in the schools, it might be much more appropriate to do on the job. Maybe there are things you're teaching in your classroom that could be better learned on the job. Individualized instruction in tasks makes clusters, and that's what it's all about. To get to specific related instruction, we talk about opportunities, training stations, careers, and everybody gets excited about teaching the universe. This not true now--as everyone is going to go to school all the rest of his life.

Each of us is still going to school. We're going to continue to teach these clusters and these tasks from now on. We have the fascinating job of preparing people for jobs that don't even exist. Some of us are preparing to teach people about jobs that don't even exist. So, for teaching the individual, you probably ought to take a look at the basis of job analysis. The physical requirements--for those of you who are of my vintage, remember, "no stoop, no squat, no squint". These are some of the characteristics that you take a look at in these jobs. Do they stoop, do they squat, do they squint, do they walk, do they climb, do they sit, do they reach, do they bend, do they have physical limitations that preclude the possibility of their learning this particular kind of task? You need to know these things for task teaching. So this puts the obligation on you. Take a good look at what needs to be taught in that individualized instruction. Should they be quick, should they be quiet, should they be noisy, should they be calm, should they be nervous? There are other times when an attitudinal thing is most important. It's pretty tough to beat the Boy and Girl Scout law when you teach about that kind of thing.

Individualization of instruction must be done within the framework of school policies, and I don't say that just to placate the administrators that are here, but you do have a framework within which you must work, and that is part of what you need to know--the records that are available to you, the coordination time that you're using to operate a coop, the time that you need for preparation. This is one of your big problems, the reason you aren't teaching individualized instruction, is that you don't have time to get ready for it. Some students in the class can take over the jobs of teaching others individual tasks. You have a library situation that you find, the texts or lack of them, the outdated equipment, you have to be teaching for a transfer. There are some ways around these things. There are leases, you know. You can rent items, you can rotate them, you put the students in a cooperative program for right equipment, for laboratory experience that you couldn't provide them without unlimited capitalization for your programs, because obsolescense is too big a factor in technological development. It's moving so fast that you can't possibly stay with all of it, anyhow.

Weale made a study at Columbia University about the most effective teaching devices. He was particularly concerned with individualized instruction. Demonstration methods--very effective, rated at the top of the list, 95%. This has some implications for you. When you use demonstration as a teaching tool, it doesn't have to be you. You can get somebody from downtown and let them see a good demonstration, and you don't have to teach it. There are people better than you in business in every job you teach. The second item is discussion. This is very interesting. Students want to communicate with you. They have a lot of unanswered questions. No lecture, but discussion, where they get a play in this thing. This is where you individualize on a group basis. It gets some reactions. When you get to involvement, where there's good interplay, that's a good place for individualized instruction. We're talking about a whole conceptional, attitudinal, manipulative concept where these things are put together in a workable capacity so that there's a marketable competency. Use of field trips (and we're assuming planning), films, cases, lecture. The workbook ranks low, and do you know why? It really isn't individualized, it's segmented. You're the one that makes instruction specific--you're the one who individualizes it. I have a feeling that the most effective materials are those that are developed by local coordinators--or local teachers--or local whatever-they-call-you, you're professors. The most effective teaching materials are those that are composites of the resources that are available to you, directed toward individualization. Real individuality comes when you use the services or an advisory committee for the community or the market in which you market your students. The youngsters, I suppose, from fifty miles around Austin come to Austin. So that's the market that you need to know about. Take a look at the market when you are talking about individualized instruction--don't individualize it for the one bank in your town. It can't use them all, even after hours. So, job analysis for the job situation in which this student will go to work is the fundamental thesis for individualizing instruction. I don't mean the immediate job, necessarily. Train him for a group of tasks, or a cluster of competencies, that's a more sophisticated way to express it today, so that they will have an opportunity to express the individuality and develop the competency that gives them a marketable body that includes affective, intellectual, and manipulative abilities. The how to do and why it should be done and do it when it's needed and to whom it's needed. Teach and reteach. You determine what it is, you determine when it's needed, when it's taught, to whom it's taught, and when it's needed. A study done in Illinois had suggestions from graduates about what they would like to have had when they had their experience in business education, and the first thing was adequate equipment. Maybe the only way you're going to get adequate equipment is to take a look at an expereience component on the job in the business community, remembering there's nothing magic about a certain block of time--it doesn't have to be for a whole year, maybe it's for a semester, maybe it's for six weeks, maybe it's for whatever time that youngster needs to learn. How needed--when needed--by whom needed. I think that these should be the criteria that decide when we do this individualization and instruction. Texts can be important. You should recognize that so many things that are in texts are just resources that you should draw upon for information for individualizing the instruction as you develop your own materials. They want larger classrooms, and believe it or not, in spite of this respectability of generalization at this point in time, the graduates say that the things they want are more specific projects, things that they can do and sell.

Then, on top of that, more challenge. More diversity, more components in the cluster, if you please. Actual, real situations to work on. The miniature letters, the psuedo filing situation, are probably necessary, but if you aren't teaching for transfer with those miniature tools, you miss the boat for your students.

Do some multiple channel teaching work on some video tapes, and use parts of programs texts, and get some recorded instructions for your youngsters, so they work on an individual basis. You can overdo films, just like you can overdo anything else, don't overlook that, also.

Don't overlook all the good things that you are doing now. There are any number of traditional activities in any discipline in vocational education that are being well done with current methodology. Then, bring your own ingenuity in--do them just one at a time. That's just like the task you teach the students--just one at a time. And do some of the things that you haven't found out are impossible. Some older teacher tells you that they tried it 25 years ago. Well, that's good. They tried theirs 25 years ago, and it didn't work. The society that they were working with wasn't ready for it.

I believe that individualized instruction is based on need, not on disaster or catastrophe. It's taught with control, not with panic. It may be remedial, but don't become involved in a total program of special education teaching everybody else's remedial work. That means some screening. You're a teacher--not a fireman. Don't be running around, putting out everybody's fire. You know, don't start the three ring circus, and then wonder who is the ringmaster. Put these components of individual instruction tasks together so that you get a cluster concept that is a marketable kind of thing. I think you plan a task to be flexible, but that doesn't mean it has to be fluid. Do some of the things that you know and are doing well. Specificity, I think, is the name of the game. So the heart of the program is the production of a total person, manipulatively, cognitively, and attitudinally sound.

PROBLEMS IN TEACHING STUDENTS WITH A LANGUAGE BARRIER OR DIFFICULTY

Presented by Felicia Brown, Instructor
Office Occupations, Texas Southmost College

The language barrier is a relatively recent problem in the border area in the realms of high school and college education. Not too many years ago, the majority of students with a language barrier dropped out before they reached this level of education. The high dropout ratio for the Spanish-speaking student, I feel, had a two-fold cause: namely, the language barrier and the economic barrier. Most of the parents of this high dropout group spoke no or very little English. The parents did not see the need for an education and did see very clearly the need for keeping the children home to work in the fields or "go North" to help in providing food for the family. In addition, many of the small percentage of Spanish-speaking students who did finish high school left the border area because they could not find jobs equal to their ability. Away from the border, they tended to be judged more on their ability rather than to be automatically classed as uneducated because they were Spanish-speaking.

The picture is gradually changing. Today the majority of the Valley graduating classes are Spanish-speaking students. Many of the schools have had Spanish-speaking valedictorians, salutatorians, and honor graduates. Gradually, more and more the educated Spanish-speaking student is staying or coming back to the border area to live and raise families. This group knows the value of a good education and of getting as much education as possible. These families make many sacrifices to provide this education for their children.

The twin-problems: low-achievement level of many Spanish-speaking students, and the lack of a rich cultural background due to low income of a large percentage of this group are still with us but we feel the percentage is getting smaller.

One of the greatest factors in solving these problems is the attracting of well-educated, concerned classroom teachers. We have not been able to attract an abundance of high-calibre teachers because we are not a rich area; we are a long distance from large metropolitan, industrial areas; and our school districts offer minimal salaries. In my opinion, one of the major contributors to improving the calibre of teacher and, in turn, improving the educational standards of this group has been the concern on the part of both the State Education Agency and the Federal Government through the monies provided for teachers as well as facilities through their vocational programs.

With this background, let me talk more specifically to our program at Texas Southmost College and our concerns in providing our junior college students with a well-rounded education, as well as a marketable skill in the market place at the close of two years' training.

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First, let me point out that we are a small college--but growing! Small colleges do have some advantages, but they also have a few disadvantages. Our enrollment in day and night school combined is a little over 1500. Because of the relatively small enrollment at the present time, we cannot have as much flexibility as we would like to have in our business education program.

(Each conference member was given a copy of our four two-year terminal associate degree plans and our two-year transfer plan for business majors.)

Because of the open-door policy of junior colleges, many of the students we attract lack background necessary for college-level courses. This is especially true in the case of English. The high school track programs have permitted granting diplomas in many cases to students who were sorely lacking in English and other basics to college-level courses.

In each of our business degree plans the regular college English is required in the freshman year. Our English Department gives a placement test to determine if the student is ready for this course. If he cannot qualify on the placement test, he is required to take a non-credit English course to build up his vocabulary and grammar fundamentals. Each semester he sits again for the placement test until he passes it. He then registers for the English Composition course.

The English Department also operates a Language Lab. This is conducted by student assistants and gives the student additional work in the phases of English in which he is weak. This may be in the form of grammar drill work or it may be in the form of paragraph writing, sentence structure, work meanings, or reading comprehension. The English professors supervise these labs.

The non-credit English classes are limited to 20 in enrollment so that more individual work can be done with each student. Our other class enrollments are closed at 25 students and will be possible as high as 30. Small enrollments per class, I think, is one of the advantages the junior colleges can offer because, in general, we do not attract the top students--and the ones we do attract are students who need more individual help and motivation.

In the Business Department we offer a course titled Business English. We try to encourage our students to be bi-lingual--both the English-speaking students and the Spanish-speaking students. If these students plan to work in the border area, it is a very definite asset for them to know the two languages. Our Business English course stresses the difficulties shorthand students have in transcribing plate material. We find that our Spanish-speaking students have a definite aptitude in getting the shorthand plate material, but have definite shortcomings in transcribing. They have the facility of being able to learn another language, which shorthand is, but they tend to "bog down" when it comes to the idiocyncracies of our English language.

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We try to select typewriting texts that emphasize English grammar as well as typewriting technique. We feel the more exposure to grammar the more likely the student is to be able to retain the information.

I, personally, feel that we have gone through or are in an era of "watering down" some of our business courses--namely, personal typewriting, record-keeping, notehand offered on the high school level. Many students who take a one-semester personal typewriting course use the typewriter only as a last resort. They do not have confidence in their ability which students with a full year's course have. We business teachers have let business be pushed into the background by track programs which give the academically-inclined student very few electives and thus weed him out of the business courses he formerly could elect.

We, as professionally-trained business teachers, need to maintain high standards. You will note that our degree plans are all two-year plans and are rather challenging. I, personally do not favor a one-year certification plan advocated by some to compete with business colleges. Those who advocate the one-year plan tend toward eliminating the standard English, Government, and History courses and stress the skills. Persons in business must be responsible citizens in our democratic society and they get this understanding through general education.

I, personally, prefer the two-year Mid-Management program outlined to the cooperative plan for this same reason--that of maintaining high standards. We need to keep the student in the classroom as long as we can. The fewer his hours in the classroom the lesser his opportunities for promotion into more responsible positions.

It is our professional responsibility to give the students an opportunity for the most worthwhile education possible as well as a marketable skill in our two-year programs. We need to encourage the students to take these minimal two-year programs plus any complimentary courses in which they may feel deficient.

So, in summary, I see the problems of teaching students with a language barrier as:

1. Too little exposure and use of the English language. Let us try to provide stronger English courses for these students. Don't try to provide a course to fit the student, but offer supplemental work so that the Spanish-speaking students can gain from and pass the standard freshman English plus be capable of using correct English in his other classwork and on the job.

2. Reticence in speaking out in class or of coming in for extra help. Small classes, I feel, will help the student to feel more at ease and more communicative.

3. Deficiency in background due to both language and economic factors.

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The solution, I believe, is in keeping our Business Department standards high but offer complimentary, "extra" courses for these students to help make up for this deficiency.

PROBLEMS IN TEACHING STUDENTS WITH LESS ABILITY

Presented by Joe M. Hendrix, Technical-Vocational Director
Kilgore College, Kilgore, Texas

Thank you, Mr. Thomas. I certainly want to apologize for my speaking ability, because I am not a speaker; this has been very brilliantly illustrated to me in the past. I lived in Austin before moving to deep East Texas. I expressed my interest to a friend of mine, who was a psychiatrist at the State Hospital, that I would like to be a public speaker; but I just didn't know how. He said, "Joe, being a public speaker is no problem; it just takes practice." He said, "I'll tell you what you do; you work up a speech, come out to the State Hospital, and I'll get some of the inmates together. You give your speech in front of them, and with this practice you will become a proficient speaker." Well, I worked very diligently on the speech. I practiced it in front of a mirror; I did everything I was supposed to do; I went out to the State Hospital, and the psychiatrist gathered a very nice group together. I started giving my speech, and I gave it everything I had. I thought I was doing a tremendous job, until right about the time the speech was half over, a guy in the back of the room stood up and said, "This is a lousy speech." Well, this certainly hurt my ego, but it didn't seem to bother anybody else in the group; so I continued. I got about three-fourths of the way through my speech, and the same guy stood up and said, "This is undoubtedly the lousiest speech I've ever heard in my whole life." Now, this completely shattered me; so I turned to my friend, the psychiatrist, and said, "What should I do? Should I stop, or should I go on?" He said, "Goodness, no, Joe, don't stop; this is wonderful therapy. This is the first sensible thing that man has said around here in weeks."

I had planned to work on this talk under the academic atmosphere of Scholz's Beer Garden tonight, so I could give it tomorrow. Due to the change of time, I can't say that I'm really completely prepared.

Being in deep East Texas, we do have a number of students that we might refer to as being from a lower socio-economic background. I feel, and I think we all must feel, that we have a problem to face in our schools. How do we offer these students an education to meet their needs. We just can't ignore this problem any longer. Who is the disadvantaged youth? What is social, cultural, disadvantaged people? Well, I think first we are going to have to say that these people are in some way incapacitated for effective living in an urban, industrial, and democratic society. The socially disadvantaged youth is one who is handicapped in the task of growing up; and, therefore, is not able to become a competent, English-speaking, self-respecting, self-supporting American citizen. He may be defined in three ways in terms of certain family characteristics, in terms of personal characteristics, and in terms of social characteristics. Before any generalization of a characteristic can be made, it is important that we recognize that the socially disadvantaged youth is not necessarily mentally retarded, physically handicapped, or even emotionally disturbed.

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Probably, the one characteristic that all have in common is that they are from low-income families.

Rather than talking on my prepared speech here, and I know time is growing short, I'd like to tell you the things that we are doing at Kilgore College. Certainly we do not have ultimate answers. We really have more questions at this point than we have answers. But, in the last three years, we have been getting more and more of this type of student. In our first step in the direction to offer help to these students, we felt that a reading ability--an improvement in their reading ability--would be an asset to them. We received a Title III grant from the Higher Education Act of 1965, and we spent one semester in surveying the reading abilities of all our technical-vocational students. I'm not talking today about anything that we're doing in the academic area of the college--just technical-vocational. During one semester, we hired a reading consultant. She tested the reading ability of all of our technical-vocational students. I thought you might be interested in seeing some of the results in reading level that we had from the tests that we gave the students in our occupational training program.

This is the grade level of the reading grade levels. This is the number of students that we have in each of these particular grade levels of the reading ability tests that we gave to our students. You can see that most of our students fell at the 11th grade level. You can see the large number of students that feel in reading ability below the college level. From these programs, you see the number of students by grade level in some of our occupational training programs. Our Data Processing program was a little higher than most, but still we had six students in Data Processing who were reading at sixth grade level.

We thought reading was a very important skill, not only in learning the college work that was going to be put before the students in two years, or one year, but also in the training program that we have. We also thought that a reading skill was necessary if they were going to stay up, current, with their particular vocational goal. So this is the reason we looked into this reading program, just to see where our problem was. And due to the statistics here, we found out that many of our vocational students do have a reading problem. Then, we tried to make a correlation between the reading ability of our vocational students with their ACT composite score. We found with our correlation that the ACT composite score, in English, I might mention, below fourteen, usually indicated, certainly not always, a deficienty in reading ability.

In the spring semester of last year, we installed a reading program with the help of the technical-vocational department. We equipped it, and offered reading for the first time for our vocational students. If their ACT score was below 14, we highly recommended that they take a reading course--a three hour, one semester course. After one semester, the average reading level of the students was raised by more than a grade level. The students spent three hours a week for one semester.

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We made another step in our occupations area that will be of particular interest to you. We felt that we had many students, primarily girls, who were not successful in our regular secretarial science, general business, or accounting programs. We knew for a fact that they were dropping out of school; they were dropping out of classes. We were not retaining them; we were not giving them needed occupational skills. We made a little survey of our secretarial science students at the end of the fall semester last year. We looked at a group of students who had an ACT score of between 3 and 13. And we looked at their grades by student. We found in the group of 3 to 13 that none of them made an "A"; 6 made a "B"; 24 made a "C"; 26 made a "D", and a large number made "F". These grades from this group indicated to us that a student below the ACT score of 13 was not successful in the program we had to offer in business training. Students with the ACT score of 14 to 15 were doing somewhat better. We made surveys in secretarial science and in general business. We also made surveys in other areas; but I did not prepare charts in one and two-year accounting and other programs. But we had practically the same picture for all areas. That is, the students with low ACT scores were not being successful in our one and two-year programs that were currently offered at Kilgore College. We then instituted a separate and distinct program in office occupations for students with lower ability levels. We did this in the spring semester of last year for the students who were not successful during the fall semester. We continued the program this year, offering it at the beginning of the fall semester for students who wanted office occupations, but who had ACT scores lower than 10. Each of these students who registered was counseled by one particular counselor who was completely familiar with this program. She had good results in selling the students, most of whom had ACT scores below 8, some as low as 2 and 3. You might be interested in what we are attempting to teach these students as far as our course outline. We have designed a one-year course of study for this type student. Again, this is our first effort. We're still looking at it very closely. We plan to have only a one-year program for this particular type of student. We feel that some of the students, after one year in this particular program, will be able to move into our other programs in office occupations. Many of them will become employed after one year of this particular program.

We have a number of problems in getting this program established. We had a number of teachers who just did not feel that we could have a program of this type. They felt that it would destroy the tremendous reputation that the office occupations program at Kilgore College had built up over the years. And I think we did have a fine reputation. Many of them felt that this type student could not be trained at the college level. But the administration of the college did feel that we did have an obligation to train this student in an occupational level. Now, I might mention that we have other programs of this type, but this is just the one that I am mentioning here at the office occupational level. And this is what we are attempting to teach. We have found this year that these students can learn a skill. In our business machines class, we only have 15 students in a section, and we're trying to teach skills on one machine at a time rather than teach thirty students in two groups on two types of machines. But they are succeeding in learning to operate machines that we are training on. We have a small group, we work with them on an individual basis, and they can be successful. We find that they are successful and can pass the required mechanical ability. They can perform tasks that are repeated time after time and do not require a lot of reasoning ability. We are still working on this program. We are still making changes. We have scheduled a basic office procedure course in our second semester. We will possibly substitute an office duplicating program for this course. Office printing will be included. We hope to teach them the operations of the Multilith 1250 for an example. We have run surveys in our area and found there are many office jobs and many businesses which would like to have a person to do their printing, light filing, typing, etc. We are planning to offer key punch. We feel that in one semester many of these students, by taking only one course, can acquire a skill that they can use in employment. We worked real hard to get this program established, and we had our finest business teachers in these classes to teach the students.

I would like at this time to introduce Mrs. Waldman, who is one of our teachers in this area. She will talk with you, for just a moment, on the problems and challenges that are evident in the training of this type student in office occupations.

PROBLEMS IN TEACHING STUDENTS WITH LESS ABILITY

Presented by Mrs. Florence Waldman, Instructor
Office Occupations, Kilgore College, Kilgore, Texas

Thank you, Mr. Hendrix. Miss Brown said earlier that she was repeating, and I guess that I am going to repeat what was repeated. I do not come here to speak with you as an authority. I don't even have any of the answers. But the first thing that I would like to say about our program is that Kilgore College and its trade territory are fortunate to have a business major as our occupational director. One is fortunate to have administrators who recognize the need for a new program, or a new approach to an old problem; namely, the underachiever. My co-workers and I have had 100 percent backing and encouragement from our academic dean, the president, and Mr. Hendrix. We had monthly meetings with these administrators to discuss the aims and achievements for the program.

When Mr. Hendrix asked me to talk to you about the problems in my field, my first thought was that we have no problem, and that is a true statement as far as it goes. We have no disciplinary problems. Our attendance has been amazingly near perfect. The students' attitudes have been marvelous. Dropouts are just nil. One person did a tremendous job as a counselor. Our wonderful counselor for the department recognized the necessity of changing or adding to our established curriculum to fit the needs of this group of underachievers. She worked with the dean and the president to help Mr. Hendrix and our department in establishing this basic program--a name we use for the lack of a better one-hour basic program. Through individual counseling, Louise Jeter created an atmosphere for us in our classroom that eliminated all of the elementary problems that I said we didn't have. She made these students feel that this program was set up just for them, that they were special young people who were going to be given the opportunity to learn, that we at Kilgore College were offering them the chance to develop occupational skills that are usable--a chance to possibly go into regular college courses if they proved themselves. Believe me, these young people came to class eager to learn. Would you believe that the biggest problem last school year was body odor? In office practice classes where I had only girls, I discussed personal cleanliness I think more than I did office practice. I told them basic facts that no one probably had ever told them before--to bathe every night, to use a deodorant, and to keep changing deodorants until they found one to work for them. You can laugh, but you are not teaching in a small classroom. I even went so far as to tell them to wash out their underwear at night, not to put dirty clothes on a clean body. None of this advice helped until one day, when spring was turning into summer and I could hardly force myself to stay in the classroom, I all but stamped my foot in anger and said very harshly that there was no excuse for the odor, and I was not going to stand for it. Believe me, I think getting a little angry with them helped. In the meantime during this process of trying to find out what the problem was, I found that one beautiful, well-groomed young lady, who was one of the worst offenders, had a very peculiar physical condition. When she became nervous, her freckled hands became involved with her various body odor chemicals and reacted very unfavorably. Really, the nerve played a part in the body odor. It was not just a question of being clean. I think I am learning more than I am teaching, but let's get down to the business of teaching problems. One problem we have is finding textbooks to fit our needs and finding additional materials that are for college teaching, but on the low achievement level. Our second problem is grading. How can we, or better still, who are we to evaluate their work? They come to us with such a lack; for example, the young lady who had to count on her fingers to go from two to four. Another one could not do simple filing because she did not know the alphabet. One who was in office practice filled out a job application blank and as a personal reference used "a Paspure"--that's right, a "Paspure". You know, a minister. Now you can laugh, but I got up and left the room so I wouldn't cry. These things hit me deeply--to think that these young people did not know some of the basic information that I assumed everyone knew. Another problem is having so many levels of ability in each subject. Now this situation is different when one is teaching a regular college course. He goes at the rate he thinks a college course should be taught, but in these basic sections we have to go at many different levels. It takes several weeks to find out who is at what level in order to accomplish grouping. Do you know what this means? Twenty-five students--twenty-five different levels. Eventually, you can get down to maybe ten or fifteen groups. In typing last semester, I was able to get down to three groups which, of course, was a big help in teaching. We often have to adjust our plan to take care of individual differences. Another problem is assigning homework, or no homework. To assign outside work for this type student is almost worthless. When there was an assignment to read a newspaper and bring a clipping to class, we found that some students do not have papers in their homes. Therefore, we feel that supervised work during class time is more beneficial. We try not to set our goals too high. We must have realistic goals for each student in each class, but we must keep in mind their lack of ability. We need to create a calm and relaxed situation in the classroom, because these students do not do good work under any sort of pressure. For example, we never announce a test. We suggest that the students review what we have covered; then the next day say we will do one more assignment on this particular field before we go to a new chapter. You say the word test, and they just freeze. We must give simple instructions because even the most basic vocabulary is not always the language of the class. Almost every word in directions needs to be explained. In other words, communication is our problem. We don't all speak the same brand of English, nor do we all hear the same sounds. Like the girl with her "Paspure." I am sure that is the way she hears it. I'm sure that is the way it is spoken at her breakfast table. One student wrote in her English class that her dog went "rat" to the fireplace. That is the way some people talk, and that is the way they write it naturally. That brings to matter another real problem. We only have the students a few hours a day for a few months. We cannot change their home life, the way their parents and friends talk, live, or believe; nor can we tell them that their parents are wrong. One of our young ladies last semester was an actual nervous wreck because someone had put a spell on her. She believed in witchcraft. So did her mother. In fact, her mother found out about witchcraft in the Bible. So all we can do is try to break the gap between school, college, and the home; then pray that when the students move away from their nest, something we tried to teach rubbed off on them. Every step of their success or achievement needs to be recognized. I try to give these young people at least one compliment a week without being too obvious. If I can't compliment their work that particular week, I try to say something about a becoming hairstyle or a new dress, shoes, or anything that would be on the complimentary side. You should see them react. Some of these unfortunate ones have never had a kind word spoken to them outside of the house. Our biggest problem is to find out what else we can do to prepare these young people for a place in today's world? We can't all work in the business world; so what other subjects and skills can we offer? Where, oh where, will the colleges get financing for more classrooms and more teachers? The underachievers will be with us for years, and we must prepare for them in order to prepare them solutions. To teach this group we must have compassion and understanding. We must always have a smile on our faces. If you make these students feel like humans, they will work their fingers to the bone for you. To teach this group, one must have patience, and then more patience. One reason why I try harder every day in every respect is that for the grace of God, there sit my children.

Mr. Hendrix

We had two young ladies--twins in fact--in our program last year. They were in this program for one year. In a follow-up of basic students we received this letter from them: "Bonnie and I are both file clerks. Bonnie works at CNH Transportation Company and I work at Lincoln National Life Insurance. Every time we say we attended Kilgore College, someone says something good about it. Kilgore College certainly has a good reputation." This is what we are working toward--getting them on the job. Thank you.

THE USOE TAXONOMY OF OFFICE OCCUPATIONS

Presented by James Coe Linn, Instructor of Office Occupations
Central Texas College, Killeen, Texas

Mr. Thomas wrote me recently that several teachers had asked him questions about the USOE Taxonomy, and he asked me to present the taxonomy here today. Mr. Thomas apparently overlooked my letter asking for information, because I was one of the teachers most interested in the topic.

It's a pleasure to see each of you here today. It is indeed a boon to us in Office Occupations to be able to meet each year and to exchange ideas, to learn of new innovations in our area and to gather in friendship. We owe a debt of gratitude to our local hosts for making this workshop available to us. Each year the workshop becomes more valuable.

There have been a great number of changes since the passage of the Vocational Education Act of 1963, and I would like to speak to you for a time about the taxonomy that has evolved in our area from that 1963 Act. Webster's New World Dictionary calls taxonomy "the science of classification." There are few areas in education that have so many facets that require classification as does the area of Office Occupations. We spent years training students for general positions in offices, with little in mind as far as specific positions. This was fine as long as business required no more of us than well-trained general office workers. But business couldn't remain satisfied with the general office worker. Business became more specialized and began wanting us to give them people trained in more precise jobs such as correspondence clerks, chief clerks, or quality control clerks, instead of general office clerks, and each requiring specialized training--training which we were giving in small doses in our Business courses. Once business made their wants known to us through applicants, through their own training programs, and through telling us directly, we began to get the message. We found that technological advances in business were outdating much of our subject matter as well as our broad classifications of the subject matter. The Vocational Education Act of 1963 gave us the boost we needed to reorganize, re-evaluate, and revamp our plan of attack on the problem of placing our students in jobs requiring more specialized skills.

Under the Act, Federal funds became available for training people in many vocational fields, as well as the requirement that each school in the nation that accepted financial aid under the Act use a standardized reporting method. It became necessary to identify and define the content of Office Occupations Education in terms of what business needed and what government expected. Prior to the Act the major body of information available for definition and classification of jobs was the Dictionary of Occupational Titles, which was much too cumbersome to use effectively under the terms of the Vocational Education Act.

Groundwork for the classification of all education was done by Dr. John Putman and Dr. Dale Chismore of the United States Office of Education. These two men designed the Taxonomy of Education, classifying twenty specific curriculum areas which are:

THE USOE TAXONOMY OF OFFICE OCCUPATIONS

01. Agriculture
02. Art
03. Business
04. Distributive Education
05. English (or Language Arts)
06. Foreign Languages
07. Health Occupations Education
08. Health and Safety Education, Driver Education, Phsysical Education and Recreation
09. Home Economics
10. Industrial Arts
11. Mathematics
12. Music
13. Natural Sciences
14. Office Occupations
15. Social Sciences/Social Studies
16. Technical Education
17. Trades and Industrial Occupations
18. General Elementary Education and General Secondary Education
19. Differentialized Curriculum for Handicapped Pupils
20. Cocurricular Activities

Having reached this point in isolating subject-matter areas, an Ad Hoc (or One-Purpose) Committee was formed and met in February of 1966. Drs. Putman and Chismore met with representatives of business, industry, and education to classify and codify content for placement in the office occupations subject-matter areas. The Ad Hoc Committee applied three criteria to the selection of this content: (1) the content was determined by consensus of the committee to be unique and appropriate to office occupations in terms of the Vocational Education Act of 1963; (2) subject-matter items could be defined in brief form using only prominent descriptive elements; and (3) the various aspects of organized subject matter classified under Office Occupations were identifiable by titles which the Ad Hoc Committee considered to be most appropriate to office occupations.

Out of this committee meeting came a workable taxonomy for office occupations education whcih could serve several purposes, the most outstanding being that of reporting career choices by students and enrollments in the various subject areas. Under the provisions of the Vocational Education Act, the necessity of this taxonomy of office occupations, as well as other vocational areas, became most apparent for the orderly, systematic classification into standardized terminology of the components of the total office occupations education instructional program yielded these benefits:

1. It enables State and local educational systems and the U. S. Office of Education to readily identify, collect, combine, communicate and exchange

information concerning Office Occupations Education in a comparable form. It also facilitates the preparation of the needed records, reports and summaries with greater speed, accuracy, and flexibility, utilizing electronic-data processing to its maximum potential.

2. It provides a sounder basis for describing and interpreting Office Occupations Education to all interested and concerned groups and organizations, especially business and industry, the public, and school administration.

3. It enables local, State, and federal authorities to have access to significant and pertinent information upon which to determine educational needs and policies.

4. It facilitates realistic instructional program planning and development, which, in turn, will contribute to effective administrative decision-making in the efficient operation and implementation of the instructional program.

5. It helps promote the "operational" research concept. In other words, it encourages functional research activity which is based on office manpower needs and requirements.

I'd like to now give you the Taxonomy of Office Occupations, first in its basic form which consists of eleven major office activity clusters.

TAXONOMY OF OFFICE OCCUPATIONS

MAJOR CLASSIFICATIONS

14.00 00 00 00

14.01 00 00 00	Accounting and Computing Occupations
14.02 00 00 00	Business Data Processing Systems Occupations
14.03 00 00 00	Filing, Office Machines, and General Office Clerical Occupations
14.04 00 00 00	Information Communication Occupations
14.05 00 00 00	Materials Support Occupations: transporting, storing, and recording
14.06 00 00 00	Personnel, Training, and Related Occupations
14.07 00 00 00	Stenographic, Secretarial, and Related Occupations
14.08 00 00 00	Supervisory and Administrative Management Occupations
14.09 00 00 00	Typing and Related Occupations

14.10 00 00 00	Miscellaneous Office Occupations
14.99 00 00 00	Other Office Occupations

You will note that the 14. preceding each of the classifications comes from the previously mentioned Taxonomy of Education in which Office Occupations is listed as Number 14. The next two numbers, .01 through .10, are used to identify broad, general office activities and .99, a catch-all classification, for activities which do not fit into any of the other ten. Careful planning in the numbering of the taxonomy will permit further additions from .11 to .98, or a total of 88 new classifications that may develop in the future as technology expands. These eleven clusters engulf all activities in a modern business office.

From these eleven clusters the developers of the taxonomy went to the identification and codification of specific jobs or positions under each. (The entire Taxonomy of Office Occupations follows Mr. Linn's speech.)

Underlying this detailed taxonomy are a great number of implications for Office Occupations Education. Those implications most easily recognized include:

1. Data will now be more meaningful to us in that enrollment will be reported by occupational categories and not only by subjects. These data will reveal to what extent office employee needs are being met. This is done by a comparison of the Training Output with the Demand for Trained Personnel. A state or local educational system can determine from these data to what degree it is offering a balanced program of Office Occupations Education, balanced in terms of the ten occupational classifications in the field--not merely Stenographic/Secretarial or General Office Clerical or Bookkeeping.

2. The curricula and instructional content will become more realistic, being developed and implemented in terms of the behavioral requirements of the office occupations as revealed through job and business community surveys, advisory committee participation, job analysis and specification techniques, follow-up of graduates, advisory services of office specialists and office management consultants, and realistic and operational research.

3. Standards of achievement or the matching of student performance with actual job competency standards will reflect occupational requirements more realistically.

4. Teacher education will become more functional. In other words, the prospective business teacher will be more trained as a TEACHER OF OFFICE OCCUPATIONS and less of a teacher of business subjects. He will increasingly receive the kind of education and training which will make him more knowledgeable about office occupations requirements, and this will enable him to work and cooperate more effectively with the business community.

5. Instructional organization will steadily move from the traditional "period-per-subject" arrangement to such approaches as two-or-three hour block time and the model or simulated office laboratory.

6. A greater variety of instructional methods will be utilized, with teachers having expertise in programmed instruction, team teaching, in-basket projects, case-study approaches, and role playing.

7. Instructional materials will increasingly reflect the realities of office work in that textbook companies are beginning to develop soft-cover short instructional unit materials and business teachers are finding it imperative to use in the classroom actual forms, manuals, and reports.

8. Greater and more effective use will be made of audio-visual instructional media and equipment.

9. Instructional facilities and classroom arrangement will need to reflect more and more the environment and work flow found in the modern office.

10. Vocational guidance will be assuming a more important role since the teacher of office occupations will become more knowledgeable concerning this area. More cooperative efforts will be effected between the business teacher and the school's counseling staff.

11. In-depth Follow-Up of Graduates will be directed toward improving and updating the curriculum and instructional content and used as an effective resource for instructional program interpretation.

12. The Business Department of any school will assume an active role in the actual job placement of its graduates.

13. Instructional program evaluation will become less process oriented and more product and outcomes oriented.

14. Youth organization activity will become more occupationally oriented and will become an integral part of the instructional program.

15. Local and State Office Occupations Education personnel will cooperate more closely with and make more effective use of such resource groups as employment security, advisory committees, and professional organizations and their memberships.

16. Students must now have a career objective such as Accountant, or Stenographer, or Computer and Console Operator indicating that teacher and student will have to build around job analysis, and these job analyses can be built around listings in the taxonomy.

THE USOE TAXONOMY OF OFFICE OCCUPATIONS

These are only a few of the benefits implied for us as a result of the Taxonomy of Office Occupations. The Taxonomy can only result in the improvement of the field if we use it wisely. A copy in the hands of every teacher of office occupations, every counselor, and every administrator can give us improved office occupations curricula, and in many instances, outdated programs will be modernized and updated so as to be more meaningful to the student seeking post-graduate employment.

An effective post-secondary Office Occupations Program is one that utilizes the Taxonomy effectively, and offers the student training in each of its classifications. Individual course offerings in each of the job classes is not necessary, but our course offerings should include enough material relating to that job class that the student can assume the basic responsibility of the job whenever he does go to work.

Throughout the State and the Nation, basic Office Occupations Programs bear a great deal of resemblance. In attempting to define a standardized program that would be effective at the post-secondary level, we find that most schools have basically the same course offerings. It is not the course name or placement that is of utmost importance--it is the content--a content that should be developed from our basic understanding of the Taxonomy of Office Occupations.

TENTATIVE
Work Material

OFFICE OCCUPATIONS

14.00 00 00 00

This body of subject matter, or combinations of courses and practical experience, is organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected office occupations. In the instructional process various aspects of subject matter frequently are drawn from other subject-matter areas. Learning experiences are designed to lead to employment and/or advancement of individuals in occupations in public or private enterprises or organizations related to the facilitating function* of the office. Included is a variety of activities, such as recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and the reporting of information. Under this heading are the items of information which identify categories of career objectives in office occupations, and around which courses and practical experiences are developed.

14.01 00 00 00 Accounting and Computing Occupations--Planned learning experiences which include a combination of courses and practical experiences concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money. Career objectives are identified with a variety of occupational groups and specialization, (as indicated in the Dictionary of Occupational Titles), such as Junior Accountants, Bookkeepers, Cashiers, Machine Operators, Tellers, and Other Accounting and Computing Occupations. (See also the category 03.01 00 00 00 Accounting, and 03.03 06 00 00 Payroll Record Keeping, 03.08 00 00 00 Business Finance, 03.09 00 00 00 Business Law, 03.12 00 00 00 Business Statistics, and 03.26 01 00 00 Business Principles under BUSINESS.)

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*"Facilitating function," as used in Office Occupations, refers to the expediting role played by office occupations as the connecting link between the production and distribution activities of an organization.

14. OFFICE OCCUPATIONS (continued)

14.01 01 00 00	Accountants--Occupations concerned with the paraprofessional duties supporting the accountant in organizing, designing, and controlling numerical and financial data. (D.O.T. No. 160, series)
14.01 02 00 00	Bookkeepers--Activities concerned with computing, classifying, and recording numerical data to keep financial records. (D.O.T. No. 210. series) (See also the category 03.03 00 00 00 Bookkeeping under BUSINESS.)
14.01 03 00 00	Cashiers--Activities concerned with receiving and disbursing money in establishments other than banks, and usually involving the use of machines, including cash registers and change makers. (D.O.T. No. No. 211. series)
14.01 04 00 00	Machine Operators: Billing, Bookkeeping, and Computing-machine Operators--Occupations concerned with operations and procedures utilizing office machines for billing, posting, calculating, adding, listing, and mechanizing (other than business data processing equipment) data. (D.O.T. Nos. 214., 215., 216., and 217. series) (See also 03.03 05 00 00 Machine Bookkeeping and the category 03.10 00 00 00 Business Machines under BUSINESS.)
14.01 05 00 00	Tellers--Activities and experiences concerned with disbursing and receiving money in a bank and recording the transactions. (S.O.T. No. 210. series)
14.01 99 00 00	Other Accounting and Computing Occupations--Include here with occupations and areas of specialization concerned with computing and accounting office occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. No. 219. series) (Specify.)
14.02 00 00 00	Business Data Processing Systems Occupations--Planned learning activities which include a combination of courses and practical experiences concerned with business data processing systems and operations. Career objectives are identified with various occupational groups and specialization, (as indicated in the Dictionary of Occupational Titles), such as

14. OFFICE OCCUPATIONS (continued)

	Computer and Console Operators, Peripheral Equipment Operators, Programmers, Systems Analysts, and other business data processing systems occupations. (See also 03.01 02 00 00 Accounting Systems, 03.01 05 00 00 Cost Accounting, 03.01 07 00 00 Data Processing Accounting, 03.12 00 00 00 Business Statistics, 03.17 00 00 00 Data Processing and Computer Operation, 03.17 01 00 00 Introduction to Data Processing, and 03.17 02 00 00 Data Processing Systems under BUSINESS.) Included in 16.04 01 00 00 Computer Programmer and 16.04 02 00 00 Systems Analyst Technology under TECHNICAL EDUCATION.)
14.02 01 00 00	Computer and Console Operators--Subject matter and experiences concerned with the operation of an electronic data processing computer, including reviewing program instructions, determining procedures for a specific run, readying equipment for operation, and manipulating and monitoring controls during operation. When computer trouble develops and halts the computer operation the operator is responsible for seeking the source of the trouble. (D.O.T. No. 213. series) (See also 03.17 05 00 00 Computer Operation: Introduction under BUSINESS.) (Included in 16.04 01 00 00 Computer Programmer under TECHNICAL EDUCATION.)
14.02 02 00 00	Peripheral Equipment Operators--Subject matter and experiences concerned with the operation of equipment which is auxiliary or peripheral to the operation of the electronic data computer. Included are the operations of card-to-tape converters, tape-to-card converters, high-speed printers, and related equipment. (D.O.T. No. 213. series) (See also 03.17 06 00 00 Processing Equipment Operation, 03.17 06 02 00 Tabulating Equipment Operation, and 03.17 06 03 00 Tabulating Machine Wiring under BUSINESS.)
14.02 02 01 00	Key Punch and Coding Equipment Operators--Subject matter and experiences with operating (1) alphabetic/numeric key-punch machines for transcribing data from source materials onto punchcards, and (2) machines that print identification codes on wire, tape, plastic tubing, and other materials, including installing specified type, code letters, and symbols in mandrels. (D.O.T. No. 213. series) (Also included under 14.09 00 00 00 Typing and Related Occupations) (See also 03.17 06 01 00 Punch Card Data Processing under BUSINESS.)

14.02 02 99 00 Other Peripheral Equipment Operators--Include here other occupations and areas of specialization concerned with peripheral equipment operations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 213. and 219. series) (Specify.)

14.02 03 00 00 Programmers--Learning activities and planned experiences concerned with converting symbolic statements of business problems to detailed logical flow charts for coding into computer language, including:

analyzing all or part of a workflow chart of diagram representing a business problem by applying knowledge of computer capabilities subject matter, algebra, and symbolic logic to develop the sequence of program steps;

conferring with supervisors and representatives of departments concerned with programs to resolve questions of program intent, output requirements, input data acquisition, extent of automatic programming, coding and modification, and inclusions of interval checks and controls;

writing detailed logical flow charts in symbolic form to represent work order of data to be processed by a computer system, and to describe input, output, arithmetic, and logical operations involved;

converting detailed logical flow charts to language processable by computer;

devising sample input data to provide testing of program adequacy;

preparing block diagrams to specify equipment configuration;

observing or operating a computer to test a coded program using actual or sample input data;

correcting program errors by such methods as altering program steps and sequence;

preparing written instructions (run book) to guide operating personnel during production runs;

analyzing, revising and rewriting programs to increase operating efficiency or to adapt to new requirements;

compiling documentation of program development and subsequent revisions; and

specializing, in some instances, in writing programs for one make and type of computer. (C.O.T. No. 020. series) (See also 03.17 04 00 00 Computer Programming under BUSINESS.) (Included in 16.04 01 00 00 Computer Programmer under TECHNICAL EDUCATION.)

14.02 04 00 00 Systems Analysts--Subject matter and planned experiences concerned with analyzing and designing commercial systems, analyzing data methods, analyzing systems and procedures, and processing business data. Responsibilities include analyzing business problems such as the development of integrated production, inventory control and cost, and the formulation and refinement of an analysis system for conversion to a programmable form for application to an electronic data processing system.

Activities frequently involve conferences with (1) the project director of business data processing and department heads of units involved to ascertain specific output requirements such as types of breakouts, degree of data summarization, and formats for management reports; and (2) management personnel of operating units to revise plans for obtaining and standardizing input data. (D.O.T. No. 012. series)

Among other responsibilities of the systems analyst are: the study of current or the development of new systems and procedures to devise workflow sequence; the analysis of alternative means of deriving input data to select the most feasible and economical method; and the development of process flow charts in outlines and detailed form for programming, indicating external verification points such as trial audit printouts. Responsibilities may also include directing the preparation of programs, but does not include major responsibilities for technical, scientific, or exotic mathematics applications. (D.O.T. No. 020. series) (See also 16.04 02 00 00 Systems Analyst Technology under TECHNICAL EDUCATION.)

14. OFFICE OCCUPATIONS (continued)

14.02 99 00 00	Other Business Data Processing Systems Occupations--Include here other occupations and areas of specialization concerned with business data processing systems occupations emphasized in instruction which are not classified above, e.g., tape librarians who are responsible for storing magnetic tapes used in processing data and making them available when they are again needed. (D.O.T. No. 223. series) (Specify.)
14.03 00 00 00	Filing, Office Machines, and General Office Clerical Occupations--Planned learning experiences which include a combination of courses and practical experiences concerned with the recording and retrieval of data, including classifying, sorting, filing, correspondence, records, and other data. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the Dictionary of Occupational Titles), such as Duplicating Machine Operators, File Clerks, General Office Clerks, and other filing, office machines, and general office clerical occupations. (See also 03.10 00 00 00 Business Machines and 03.14 00 00 00 Clerical Practice under BUSINESS.
14.03 01 00 00	Duplicating Machine Operators--Learning activities concerned with reproducing handwritten or typewritten matter by use of duplicating machines and devices. Efficiency in the operation and proper maintenance of various types of duplicating equipment are emphasized. (D.O.T. No. 207. series) (See also 03.10 04 00 00 Duplicating Machines under BUSINESS.)
14.03 02 00 00	File Clerks--Activities concerned with the recording and retrieval of data, including classifying, sorting and filing correspondence, records, and other data. (D.O.T. No. 206. series) (See also 03.21 00 00 00 Filing under BUSINESS.)
14.03 03 00 00	General Office Clerks--Activities concerned with performing a variety of clerical duties utilizing knowledge of systems and reports, including copying data and compiling records and reports; tabulating and posting data in record books; providing information and conducting interviews; operating office machines; and handling mail and correspondence. (D.O.T. No. 219. series) (See also 03.22 00 00 00 Filing and Record Control under BUSINESS.)

14. OFFICE OCCUPATIONS (continued)

14.03 99 00 00	Other Filing, Office Machines, and General Office Clerical Occupations--Include here other occupations and areas of specialization concerned with filing, office machines, and general office clerical occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 208. and 209. series) (Specify.)
14.04 00 00 00	Information Communication Occupations--Learning experiences which include a combination of courses and practical experiences concerned with the distribution of information, e.g., by mail, telephone, telegraph, and in person. Career objectives are identified with a variety of occupational groups, (as indicated in the Dictionary of Occupational Titles) and specialization such as Communication Systems Clerks and Operators, Correspondence Clerks, Mail and Postal Clerks, Mail-preparing and Mail-handling Machine Operators, Messengers and Office Boys and Girls, Receptionists and Information Clerks, and other information communication occupations. (See also 03.06 00 00 00 Business Communications under BUSINESS.)
14.04 01 00 00	Communication Systems Clerks and Operators--Learning activities and experiences concerned with operating telephone switchboards and similar equipment for relaying incoming and interoffice calls, establishing connections between subscribers, supplying information, and calculating charges; and operating telegraph and similar equipment for transmitting and receiving messages. (D.O.T. Nos. 235, and 236. series)
14.04 02 00 00	Correspondence Clerks--Learning activities and experiences concerned with composing correspondence and related items for the purpose of obtaining or giving information. (D.O.T. No. 204. series) (See also 03.06 02 00 Report Writing under BUSINESS.)
14.04 03 00 00	Mail and Postal Clerks--Learning activities and experiences concerned with preparing incoming and outgoing mail for distribution, including time stamping, reading, sorting and delivery of incoming mail, and sealing and stamping outgoing mail or packages; selling postage stamps, postal cards, and U. S. Savings Bonds; writing money orders;

	registering and insuring mail; computing mail costs; sorting outgoing mail; and recording daily transactions. (D.O.T. Nos. 231. and 232. series)
14.04 04 00 00	Mail-preparing- and- Mail-handling-machine Operators--Learning activities and experiences concerned with operating machines to print names, addresses, and similar information, on items such as envelopes, accounting forms, and advertising literature; to address, fold, stuff, seal, and stamp mail; and to open envelopes. (D.O.T. No. 234. series)
14.04 05 00 00	Messengers and Office Boys and Girls--Learning activities and experiences concerned with running errands; sorting and delivering letters, packages, and messages; furnishing workers with clerical supplies; and performing similar routine tasks in an office. (D.O.T. No. 230. series)
14.04 06 00 00	Receptionists and Information Clerks--Subject matter and experiences concerned with meeting the public through (1) answering telephone and information requests and/or inquiries from company employees, or from visitors coming into the establishment, regarding such matters as activities carried on in the establishment; (2) locating offices and employees within a firm or other firms, hotels, stores, places of interest, and transit service; and (3) keeping records of callers and the nature of their business, making appointments, and interviewing people to secure required information, e.g., hospital admittance data, insurance data, and similar information. (D.O.T. No. 237. series)
14.04 99 00 00	Other Information Communication Occupations--Include here other occupations and areas of specialization concerned with information communication occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 239. and 249. series) (Specify.)
14.05 00 00 00	Materials Support Occupations; transporting, storing, and recording--Planned learning activities which include a combination of courses and practical experiences concerned with (1) receiving, storing, issuing, shipping, requisitioning, and accounting for stores of material or material in

	use; (2) assigning locations and space to items, including verification of quality, identification, condition, and value; (3) the physical handling of items, including binning, picking, stacking, and counting; (4) preparing or committing stocks for shipment; (5) inventorying stock; (6) replenishing depleted items; and (7) filling orders, and issuing tools, equipment, or materials to workers. Career objectives are identified with a variety of occupational groups and specializations, (as indicated in the _Dictionary of Occupational Titles_), such as Planning and Production Clerks, Shipping and Receiving Clerks, Stock and Inventory Clerks, Traffic, Rate, and Transportation Clerks, and other transporting, storing, and recording occupations. (See also 03.09 00 00 00 Business Law, 03.12 00 00 00 _Business Statistics_, and 03.26 01 00 00 _Business Principles_ under _BUSINESS_.)
14.05 01 00 00	_Planning and Production Clerks_--Learning activities and experiences concerned with routing parts for fabricating operations or repairs, developing work plans prior to production, scheduling work for and delivering parts to avoid overproduction, compiling records and reports on the number and types of units produced, and scheduling shipment of parts. (S.O.T. No. 221. series)
14.05 02 00 00	_Quality Control Clerks_--Learning experiences concerned with sampling, testing, and product evaluation; and running tests and recording results and variations from standards. (D.O.T. No. 168. series)
14.05 03 00 00	_Shipping and Receiving Clerks_--Learning activities and experiences concerned with assembling, packing, addressing, stamping or receiving, unpacking, verifying, and recording incoming merchandise or materials. (D.O.T. No. 222 series)
14.05 04 00 00	_Stock and Inventory Clerks_--Learning activities and experiences concerned with receiving, storing, shipping, and issuing supplies, materials, and equipment in a stockroom or warehouse environment, including taking inventories, keeping records, and requisitioning stock. (D.O.T. No. 223 series)

14. OFFICE OCCUPATIONS (continued)

14.05 05 00 00	Traffic, Rate, and Transportation Clerks--Learning experiences concerned with calculating fares for carriers from rate tables. Included are the study of maps to select or layout and measure travel routes--considering type of vehicle, distance, destination, and passenger or rate service, the preparation of written reports or informing customers orally, and computing schedules and cost factors. (D.O.T. Nos. 222. and 919. series
14.05 99 00 00	Other Materials Support Support Occupations: Transporting Storing and Recording--Include here other materials support occupations and areas of specialization concerned with receiving, storing, issuring, shipping, requisitioning and accounting for stores of materials emphasized in instruction which are not classified above, including emerging occupation s in this category. (D.O.T. Nos. 224., 229., and 919, series) (Specify.)
14.06 00 00 00	Personnel, Training, and Related Occupations--Planned learning experiences which include a combination of courses and practical experiences concerned with personnel administration of an organization and the facilitating functions of scheduling and conducting clerical work and management and operations of organizations. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the Dictionary of Occupational Titles), such as Educational and Training Assistants, Interviewers and Tests Technicians, Personnel Assistants, and other personnel, training, and related occupations. (See also 03.11 00 00 00 Business Psychology and 03.26 00 00 Labor Management Relations under BUSINESS.)
14.06 01 00 00	Educational Assistants and Training Specialists--Learning activities and experiences concerned with the train- of personnel in the facilitating functions of an organization, dealing with personnel such as teacher aides in education, training specialists in industry, and others. (D.O.T. No. 166. series)
14.06 02 00 00	Interviewers and Tests Technicians--Activities and planned experiences concerned with interviewing and administering tests to individuals to determine their appropriateness for employment and/or advancement.

14. OFFICE OCCUPATIONS (continued)

	Involved are the uses of appropriate measuring devices, and the administration, scoring, and analysis of tests. (D.O.T. Nos. 166. and 249. series)
14.06 03 00 00	Personnel Assistants--Learning activities and experiences concerned with formulating policies relating to the personnel administration of an organization. Emphasized are the conduct of programs of recruitment; selection, training, promotion, welfare, safety, compensation, and recreation involving personnel; and the separation of employees. A practical background in psychology is required for some occupations in personnel research, and in the administration of testing and counseling programs. (D.O.T. Nos. 166. and 205. series)
14.06 99 00 00	Other Personnel, Training, and Related Occupations--Include here other occupations and areas of specialization concerned with personnel, training, and related occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 166., 205., and 249. series) (Specify.)
14.07 00 00 00	Stenographic, Secretarial, and Related Occupations--Planned learning activities which include a combination of courses and practical experiences concerned with making, classifying, and filing records, including written communications. Career objectives are identified with a variety of occupational groups and specialization, (as indicated in the Dictionary of Occupational Titles), such as Executive Administrative Secretary, Secretaries, Stenographers, and other stenographic, secretarial, and related occupations. (See also 03.06 00 00 00 Business Communications and the category 03.34 00 00 00 Shorthand, Stenographic, and Secretarial under BUSINESS.)
14.07 01 00 00	Executive Administrative Secretary--(For definition see 14.08 01 00 00 Administrative Assistants under Supervisory and Administrative Management Occupations.)
14.07 02 00 00	Secretaries--Learning activities and experiences related to occupations concerned with carrying out administrative and general office duties in addition to taking and transcribing dictation. (C.O.T. No. 201. series)

14.07 03 00 00	Stenographers--Learning activities and experiences to occupations concerned with taking shorthand or special writing of notes by hand or machine and transcribing them. (D.O.T. No. 202. series)
14.07 99 00 00	Other Stenographic, Secretarial, and Related Occupations--Include here other occupations and areas of specialization concerned with stenographic, secretarial, and related occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. No. 209. series)
14.08 00 00 00	Supervisory and Administrative Management Occupations--Learning activities and experiences concerned with various responsibilities such as (1) studying policies, organizational structures, and administrative practices of such organizations as governmental units, industrial firms, and nonprofit groups; (2) reviewing periodic budgets submitted by operations personnel; (3) preparing reports summarizing findings and recommending changes in policy, organization, and administration to line management; (4) consolidating the budget estimates and preparing financial reports for consideration and action by upper echelons of management; and (5) supervising and coordinating activities, determining work procedures, and assigning duties. (See also the category 03.01 00 00 00 Accounting; the items 03.04 00 00 00 Budget Control, 03.06 00 00 00 Business Communications, 03.08 00 00 00 Business Finance, 03.09 00 00 00 Business Law; and the category 03.26 00 00 00 Business and Management Principles under BUSINESS.)
14.08 01 00 00	Administrative Assistants--Learning activities concerned with the coordinating, expediting, and facilitating functions of the office for aiding the executive, under his direction and in a confidential relationship, in the discharge of his duties as related to personnel, the budget, records control, housekeeping, making studies, conducting analyses, reviewing reports, and other responsibilities. (D.O.T. No. 169. series) (See also 03.01 12 00 00 Secretarial Accounting under BUSINESS.)
14.08 02 00 00	Budget Management Analysts--Planned learning experiences which include a combination of courses and practical experiences with (1) examining, analyzing, and

	interpreting accounting records, and (2) the study of policies, organizational structures, and administrative practices of organizations. (D.O.T. No. 161. series)
14.08 03 00 00	Clerical and Office Supervisors--Learning activities and experiences concerned with managerial occupations which require a knowledge of the management and operations of budget and management analysis occupations in the facilitating function of an organization, rather than a scientific, technical, or administrative specialty. (D.O.T. Nos. 160.-169. series)
14.08 04 00 00	Data-methods and systems-procedures Analysts--Learning activities and experiences concerned with studying policies, organizational structures, and administrative practices of an organization for the purpose of recommending and installing systems procedures and methods improvements. (D.O.T. 012. series)
14.08 05 00 00	Office Managers and Chief Clerks--Learning activities and experiences concerned with the facilitating function of the office involving supervision of the budget and management analysis staff of an office, scheduling and conducting work, and other administrative specializations. (D.O.T. No. 169. series)
14.08 99 00 00	Other Supervisory and Administrative Management Occupations--Include here other occupations and areas of specialization concerned with supervisory and administrative management occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 160.-169., 188., and 189. series) (Specify.)
14.09 00 00 00	Typing and Related Occupations--Planned learning activities which include a combination of courses and practical experiences concerned with recording data, supervising and administering typing staffs and typing, and managing offices. Career objectives are identified with a variety of occupational groups and specialization, (as indicated in the Dictionary of Occupational Titles), such as Clerk

	Typists, Key Punch and Coding Equipment Operators, Typists, and other typing and related occupations. (See also 03.06 00 00 00 Business Communications and the category 03.35 00 00 00 Typewriting under BUSINESS.)
14.09 01 00 00	Clerk Typists--Learning activities concerned with the performance of general clerical work requiring the use of a typewriter in a majority of the duties, e.g., compiling and typing reports, bills, application forms, shipping tickets, and other data from clerical records. These activities also include the filing of records and reports, posting information to records, sorting and distributing mail, answering telephones, computing using adding machines, and other similar duties. (D.O.T. No. 209. series)
14.09 02 00 00	Key Punch and Coding Equipment Operators--(For definition see 14.02 02 01 00 Key Punch and Coding Equipment Operators, under Business Data Processing Systems Occupations.)
14.09 03 00 00	Typists--Learning activities and experiences related to occupations concerned with recording data by means of a typewriter or similar device. (D.O.T. No. 203. series) (See also 03.35 02 00 00 Production Typewriting, 03.35 03 00 00 Typewriting, First Course, and 03.35 04 00 00 Typewriting, Second Course, under BUSINESS.)
14.09 99 00 00	Other Typing and Related Occupations--Include here other occupations and areas of specialization concerned with typing and related occupations emphasized in instruction which are not classified above, including emerging occupations in this category. (Specify and list D.O.T. Nos. 209. and 219. series)
14.10 00 00 00	Miscellaneous Office Occupations--Planned learning experiences (not elsewhere classified) which include a combination of courses and practical experiences concerned with the facilitating functions, e.g., public contact such as registering hotel and motel guests, examining claims and records, and collecting and tracing accounts. Career objectives are identified with various occupational groups and specialization, (as indicated in the Dictionary of Occupational Titles),

14. OFFICE OCCUPATIONS (continued)

	such as Collectors, Hotel Clerks, Clerical Technicians, Credit Clerks, and other occupations and areas of specialization concerned with office occupations not listed or classifiable in the above categories. (D.O.T. Nos. 240., 241., 242., and 249. series) (Specify.)
14.99 00 00 00	Other Office Occupations--Include here other planned learning experiences emphasized in emerging office occupations not listed or classifiable in one of the above major categories. (Specify and list D.O.T. Nos.)

POST SECONDARY PROGRAM DEVELOPMENT PANEL

Introduction

Marian Cantrell, Tarrant County Junior College

Actually, our presentation is an extension of what James Coe Linn was talking about a little earlier. These are the four clusters here you are going to hear from. They are going to be discussing some of the objectives and aims, what they are doing in their particular school in meeting some of the goals in these curriculum areas discussed. I would like for you to meet the panel. Please stand so that the group out there can see you. Discussing accounting and computing which was identified as 14.01 a little earlier: Mr. Dewitt Fly. Mr. Fly is a part-time teacher at Del Mar College. He is a full-time CPA in Corpus Christi. Discussing 14.02 which is business data processing system: Mr. Jim Hill. Mr. Hill is the data processing director for the Dallas Junior College District. Next, discussing 14.03 which is identified as filing, office machines and general office clerical: Mrs. Katherine Yates from Lee College, Baytown; and then our fourth presentation, information communication, 14.04, will be discussed and brought to you by Mrs. Sara Pynes, Wharton County Junior College in Wharton. I know that as these people are bringing their information to you, questions will come up, but rather than asking during the presentation we would like for you to wait until all four have made their presentation--then we will have one question and answer period at the end. Mr. Fly.

Accounting and Computing--Dewitt Fly, Del Mar College

Thank you. I was real interested in the topic on taxonomy. I thought I might learn some of the new income tax provisions; but I found out that this wasn't what it was, and I'll have to go back and read them for myself. When I told my wife that I had been asked to discuss accounting in Del Mar College, she said "Well, for heaven's sake, don't tell any of your dirty jokes." My college professor said to start out with a joke, but my wife forbids any jokes, so we will have to start out some other way. Mr. Ditto, you know, our assistant dean for vocational education who, I guess, is my boss, says, "tell it like it is." You can tell he hasn't had any English in our program, because he says tell it like it is. I will try to tell it like it is.

Several years ago, Del Mar in conjunction and in cooperation with industry and business in Corpus Christi, took an inventory of resources. We found that there was a group of people who were not being reached. People who graduated from high school, or else were post high school age, had no place to secure additional training. Del Mar, industry, and business cooperating together put in what we have as our vocational office education program.

You have a brochure that was passed out which we send out to all prospective students. This group of people are those who do not identify with college. They have no desire to go to college. They don't identify with it. So the purpose of our course is to reach these people who do not identify with the college. We have a large number of people who can't identify with this program, but identify with clock hours rather than with semester hours. Don't get me wrong. We do have a two-year terminal program in regular academic at Del Mar. Our program is 12 months, and we feel that this year is wisely spent in that we are reaching the students who need to be reached. They are in class for six hours a day. We have approximately 100 enrolled at all times. To show you how closely we work with industry, we have some scholarships that are provided by industries such as PPG (Pittsburg Plate Glass) and Humble Oil, and we do have some other scholarships available. Humble Oil, incidentally, did have a training program, but now Humble Oil comes to Del Mar Tech for its people. They stopped their training program, and we train their people. We still have a night program--at least until February--where we teach approximately 600 people various skills. As a part of this night program, we had a review for certified professional secretaries. We had four that passed, and we had the highest percentage in the nation passing. According to our statistics, there are only 14 of these in Houston.

So, now that we have had the commercial, we can go on. When a person gets up to speak, he always likes to tell what he thinks is good about his place. We are telling it like it is, what we think is really good. Anyway, as I said before, about our program, a large number of students can identify. We feel teaching skills can be done more economically in our program. We have advisory committees whom we work with, and they help us in designing the program. This is one thing that our program is based upon--flexibility. If something new comes out that we need to be teaching, the program is flexible enough that we can change it to meet industry and business needs. The same way in teaching it. We start four classes a year. At any one time we have approximately 100 enrolled. Our program is flexible. If a person is progressing satisfactorily--no problems. But there are some who don't grasp a concept the first time. We are able to be flexible for this person. Say a person is doing very well in shorthand and typing, but not doing too well in accounting class. We can send these people back in this particular subject and start out where they were doing well and come from there. We think this is real fine, and it has cut down on our dropout problem. We don't have a great many because of this flexibility with the student being able to go back and start at the point he was doing very well.

We do have probation. Each six weeks we evaluate a student. Since classes are right across the hall, teachers are right across the hall from each other, and they are able to chat about Sally. Sally is not making the progress she needs to be making in one course. We all try to work together to get her to make progress. If she's not making progress in all of her classes, we know something is wrong with Sally. We evaluate her at the end of six weeks. She is on a probationary period, if she makes two F's. Then, if she makes two additional F's, she is out. Our program is not for the poor student. The poor student will not be able to go through our program. For those who lack the basic skills, we have basic studies that they can start in before they come into our program.

We have separate graduation exercises, and we give students a certificate of completion after a year, if they have met our standards. It might be interesting to note that we had approximately 340 in the total vocational program receiving certificates of completion and 320 in our regular academic program. These are some of the things about Del Mar and Del Mar Tech that we thought you ought to know. My particular field is accounting, and I know what we want in accounting because when I find a top notch girl in one of my classes, I'm going to hire her. I can hire and let her do routine work, and I can go off, drink coffee, make audits, and not have to sit down and do what we call writeup, which you know is bookkeeping. So when I find that number one girl, I'm going to hire her. Our objective in the total program is to have employable skills. Skills they can market, such as in the accounting field. Can they go through from the beginning of the accounting cycle to the end? This is the sort of thing we are trying to teach. So that they can go into an office, a small office, let's say, and keep the entire bookkeeping system. Do all the bookkeeping. If you will note from our program, we give them 360 clock hours. In the regular academic where the instructor has them approximately four hours a week, or for about 135 hours in a year, as compared to 360. So you can see we are going into great detail here at Del Mar Tech. Some students will go into larger offices where they will do only one phase of the work. We are trying in Del Mar Tech to bring these people to a skill where they can go into an office and, with a little orientation, fit right into production work. In order to familiarize them with modern office equipment, we use modern office equipment. We use ten key electric machines. We use modern "L" shaped desks. We use electric typewriters; and if this girl goes to an office which still has manuals, this creates some problems. We do use electric accounting machines.

As far as how to teach accounting? What might work for me might not work for you. What works for you might not work for me. I'm no expert. I want to learn how to teach too, so that we can reach all of them. Here are some of the devices that I have used. When we first start using the fundamental accounting equation, assets equal liability plus owner's equity, I use liabilities as blue. This is money we owe, so I'm blue because I owe somebody. I say owner's equity is yellow. That's gold, that's gold in my pocket. I combine them, and what do I get? I get greeen, blue and yellow equals green. Green are my assets. Cash is an asset. It is green, isn't it? This has worked with some classes; some classes it hasn't. So there is no one set thing that we can say is going to work with every class. One of the things I'll do especially on a test, I give a question in there. I had a test yesterday afternoon. I had a true and false question, "This test is for the birds." This sounds idiotic. It is idiotic, but when a student is taking a test some of them are very, very nervous and something to relieve their tension or give them a laugh will make them do better work. I use this method sometimes. I also occasionally give a bonus. It may or may not have any relationship to the subject we are covering. For example, I gave a bonus question with two points on a test one time, "Who is Leonard Sly?" How many of you know who Leonard Sly is? Well, two in my class knew who Leonard Sly is. Who is he? Roy Rogers. He is Leonard Sly. So we have a little laugh out of these. Two points isn't going to make a whole lot on their grade, and it keeps their interest in the class. Actually they look forward, really they do look forward to it, to see what the bonus is going to be. So this is the method that I use. As far as on actual teaching in the classroom, we have one instructor at Del Mar who uses the overhead projector, and maybe we can put one of these on here. This is a balance sheet form and a report form. This particular instructor we have flashes the opaque on the chalk board then writes on the chalk board. He feels that this is better than using the grease pencil and writing on the overhead, so he actually writes on the chalk board. He has his form there, and he goes right down the line.

This is one of our problems in teaching accounting. You know we have so many forms that we can spend all of our time drawing forms on the board and not be able to teach anything. So this particular accounting instructor (and I haven't tried it, I may try it when I get back, since I stole his transparencies) goes ahead and writes it on the board, and they have the form outline before them. He has done it both ways. He likes either way, whatever works for the class.

Sometimes we have to come back and woodshed, and I'm old enough to have gone to the woodshed with my daddy, so we woodshed every now and then. When my classes don't exactly meet up to standards I think they should, this is my fault. I missed the boat somewhere in teaching them. I go back over the material. I'm sorry to say after Dr. Carter's talk this morning on workbooks; we use workbooks. We do use a workbook, I think it really does help, and we go over the workbook with the student. This is a transparency made and I hope the Gregg representative isn't here because we made it out of their book, and I know the copyright law. Don't anybody tell them that we did this, but this is the key to the workbook. We can flash it on the screen. The student can check his own work, see where he has gone wrong, and make the correction necessary. When I first started teaching, one of my old school teacher friends said, Well, I'm glad to see you are going to start chopping cotton." I said, "What do you mean?" She said, "Teaching is just like chopping cotton. You have to go down and hoe the row." This is just what we have to do, or what I do. I hoe that row; and if we don't succeed, we go back over it.

Business Data Processing Systems--James Hill, El Centro College

My wife didn't give me any instructions so I am going to start off with a joke. An old woodsman came out of the hills one day, strolling through town and went into the hardware store and was quite taken with a sign above a chain saw "guaranteed to cut six cords of wood a day." He asked the salesman, "Is this really true? Will this machine really cut six cords of wood a day?" He said, "Sure it will!" So he proceeded to sell the old woodsman a chain saw, and he took it back up in the hills with him. He got up the next morning and put in a good 8-hour day. He had been cutting about three and a half cords a day and he managed to reach four cords that day with his new saw, but he was quite astounded he didn't get six cords. So he took the saw back down to the hardware store, contacted the salesman, and said, "What is the matter with the saw? It is supposed to cut 6 cords of wood and it only cuts four." He said, "Well, sir, I don't know, we never had any complaints before, but I will give you another saw. Perhaps there is something wrong with this one." So he gave him a new saw and the woodsman went back into the hills, got up at the crack of dawn the next day, worked until sundown, just literally tore into it, and could only cut four and a half cords of wood. He was thoroughly disgusted by this time and took the saw back to the hardware store and asked to see the manager. The manager said, "What seems to be the problem?" The woodsman explained the problem was that he could cut only four and a half cords of wood with the saw. The manager said, "Let me take a look at this. We'll take it in the back and try it out." So they went back to the repair room and he got a log and put it on some sawhorses, took the saw over and plugged it in and started it. The woodsman said, "What's that noise?"

I like to start out with this because it really pinpoints what we are trying to do. We have to not only know what the job is, but we have to have the tools to do the job with. We try to pattern our curriculum in Data Processing at Dallas County around a study that originated last year. In 1966, the president assigned an advisory council to report to him on the "Role and Scope of Computers in Higher Education." This council submitted their report in 1967, with quite a number of recommendations on what the role of the computer should be in higher education in the United States. In line with this, the Coordinating Board established a committee here in Texas under the auspices of Mr. Robert Smith at Texas A&M to further develop this into the "Role and Scope of Computers in Higher Education in Texas." It was my privilege to serve on this committee and we made 17 recommendations to the Coordinating Board covering quite a wide range, but in regard to the curriculum, we broke it down into four areas that we felt should be covered in data processing instruction in higher education. The first area is the training of the computer scientists or analysts. This is the top level professional in the field--the people that are going to be doing the innovating, the leading, the designing of our systems and the education of further insturctors in data processing. It was felt that the colleges and universities in Texas should serve in this capacity and they do so in Texas as in the United States with Doctorate programs, Master's programs, and now we are getting quite a number of Bachelor's degree programs in Computing Science. Not only are these people the professionals in the field, but the colleges and universities concentrate on the scientific approaches to the computer and scientific versus business is a much maligned term. You could ask ten people and get ten different definitions of what is a scientific programmer, but we felt that the junior colleges could not adequately train a scientific programmer according to the definition that is generally held because the background they need is just too much to expect in a two-year college. I was talking recently to a gentleman from Sandia Corporation and he said that they are now requiring a Master's Degree in Mathematics before they would even consider someone for scientific programing and this is the type of programing that is done in places like NASA here in Houston. The second level, the level that was given to the junior colleges, is the training of technicians. The technicians fall into two categories:

1. The programmers or technicians, these are the Indians and it was felt that the junior colleges could do the best job in the training of the technicians.

2. Second category is the operator. We have to have computer operators and it was felt that the junior colleges could serve best in this capacity.

The third phase that we felt needed to be put into the curriculum are those disciplines that need to use the computer in the satisfaction of their job requirements, and these disciplines are such things as engineering, mathematics, drafting, electronics, and so on. It was felt that these people needed to have an acquaintance with the computer but not at the same level that the computer scientist, the business data processing programmer or operator does. He needs to use the computer as a tool, but only as a tool, and he doesn't need to know a great deal in depth about it, but just what it could do for him. This is the third phase. The fourth phase is a general understanding for everyone and this is the one that I will return to later on. So these are the four categories of curriculum that this committee felt we should offer. What are we doing at Dallas County? Probably many of you already know, but to give you a little background on it, we started two years ago with approximately 4,000 students. We have around 7,200 now and our limitation is that we are in a converted department store in downtown Dallas, sometimes referred to as Sanger-Harris University. We are in dire need of classroom and office space and we are limited until we can get some new campuses opened. In two years we will have two more campuses. We have two scheduled to open in 1970 and one in 1971, and we expect our enrollment by this time to increase to between 15,000 and 20,000 students. We have now at El Centro between 400 and 500 students in the Data Processing curriculum, and again the limitation is not that the demand is not there, it's the classroom space to house them. We could probably have 1,000 to 1,200. We have to turn many of them away. We have students coming in and taking courses in Art just to get into the school so they can get into programing the next semester, because there is just not room for them. We have two programs. One is a two-year program for Data Processing Programmer and the other is one-year certificate program for Equipment Operator. The programmers begin their first semester with Introduction to Data Processing, a lecture course designed to provide historical background and vocabulary. At the same time we have a Basic Principles class where we teach the sorter, interpreter, collator and reproducer, the wiring of these unit record devices and approximately eight weeks of RPG programing. RPG is a Report Program Generator, a high level computing language. Second semester we go into the Beginning Programing course which is a continuation of RPG and finishes up with COBOL programing, which is Common Business Oriented Language, another high level programing language. After this they go into their advanced programing class where they get Assembly Language programing, which is a lower level language more closely associated with a particular computer that you have. In other words, it becomes a little bit closer to the machine and you have to know more about the machine in order to be able to program on it. At the same time we have a Systems class which deals with a business system and is very closely allied to Accounting. What is the data coming in, what are we going to do with it, and what is the output that we want to obtain, what kind of reports, etc., are topics covered in this class. Following this, the student goes into an Operating System and Communications concept class. The operating system is not the same kind of a system as the previous course. This is the software, which is a term used in data processing to describe what makes the hardware work. The software is the program provided by the vendor that makes the machine do what you want it to do. We teach the disc operating system on the 360. We close out this course with communication concepts, which are becoming very, very important in today's business world. How do we communicate over telephone lines and what do the terminals look like, etc. The last semester the student spends 15 hours a week on the job at an industry, a program very similar to the training programs we use in the retailing fields. They work doing computer programing at a bank, insurance company, or in the aerospace industry in the Dallas area, with a two-hour seminar to cap it off. These are the Data Processing courses that are offered. In addition we have one year of Accounting, one year of the communications arts, Applied Composition and Speech, a course in logic, a course in Business Statistics, a course in Computer Mathematics, and a year each in the Social and Biological sciences. This completes our 66 credit hours. The operator also has Accounting, communication skills, etc. In Data Processing, his first semester is the same course essentially that that the programmers took, the Basic Principles course where they learn the wiring on the unit record machines and RPG programing. The second semester is advanced problems on the unit record equipment, flow charting, work scheduling, the timing, and volume jobs where we give them many cases of cards that they have to run through on a case study situation. In addition, we give them quite a number of hours operating the computer in an actual business situation. My job with the district is to provide all the administrative service functions of the computer, and I just serve in a staff capacity to the Business Department on the Data Processing curriculum. We have quite a wide range of administrative applications, but the educational uses come first. We have been blessed with a relatively large scale computer, a 360 model 40, which gives us the capability of running more than one job at one time. So to give our operators the training that we feel that they need, we have the programing classes running their programs from one source while we are running administrative applications concurrently, to the extent that when there are no programs to be compiled and run, it goes on about the administrative job. We set this up with priorities so we can establish priority one to do the programing for the classes and a priority two for the other work. We are not really interfering with the classes, it's just that the computer is so powerful and does so many things at one time. With such an expensive, powerful computer we feel we ought to use it to full advantage and this is why we do this concurrent work.

The operators, at the same time the programing classes are doing their programing, get a chance to load the disc drives and tape drives, change paper in the printer and initiate the start of the system on an actual job situation. In other words, the work that a school does on a computer is very similar to the work that you would find in any kind of industry. It is commercial processing work, and we feel that we are giving them hands on experience in a job situation rather than some isolated thing which really isn't everyday life. In addition, we are serving this year in a pilot project on behalf of the Texas Education Agency to try to find better ways to provide the type of things we feel we need to be teaching in the State of Texas at less cost and more economical operation. In line with this, we have two junior colleges in the State hooked into our computer with computers of their own. In other words, we have two computers from remote sources about 70 miles away which are tied in over telephone lines to our computer, giving their students a chance to send in programs written in languages they they wouldn't have the capability of running on their own equipment, but can use our computer just like it was theirs. There is no difference as far as they can see. They put their cards in the reader and their program comes back out on their printer at their location and yet they have had the capabilities of using our computer. We hope that this will be successful, and if so, we would probably see more of this coming into the state where the smaller junior colleges that maybe couldn't afford to get a larger computer could still get the power of a larger computer. We would call this the regional center concept with a string of satellites hooked into it. I would make one comment, I think, about the curriculum in data processing, and that is we need to adapt to changes that are coming into the industry right now. The data processing industry is probably the fastest moving one that I have been associated with and I haven't always been associated with this. I taught for seven years in business education in the State of California before working for IBM for four years. So I've been in the business aspect, and now I'm back doing both. I like education. I'm associated with education, and yet I get a chance to work in data processing which I also like very much, and I think that the biggest mistake that we can make is to shut our eyes to the changing technologies and not keep abreast of what is going on. To give you a little background on this we started out in the middle 1930's with unit record equipment, which I am sure most of you are familiar with. This was practically the sole source of computing power, so to speak, for a number of years. The first computer was built in 1946 but was just an experimental type device, and it wasn't until the early 1950's that we started seeing what we now refer to as the computer. The commercial processing computer entered the market and this was sort of a vacuum tube type thing. In other words, the data was stored internally in this machine in vacuum tubes and it was a very, very large machine. It took tons of air conditioning to cool it because vacuum tubes put out a lot of heat, and this was what we had until the late 1950's. The vacuum tubes were referred to as first generation equipment. The second generation of computing equipment came in with the transistorized circuitry and core storage replacing the vacuum tubes in 1958, and we weren't with this very long until 1964, we had the third generation of equipment. Although we think of the third generation in the field as being relatively new, it is already four years old, and the third generation is blessed with very small circuitry and the equipment is much smaller and yet it is much more powerful than the previous generation. There are already companies which claim they have the fourth generation on the market. Well, enough said about this. Also, we started out in 1950 with only 10 to 15 computer installations. Five years later we had about 5,000 computer installations. In 1965 we had 30,000 installations and it is expected that by 1970 there will be 50,00 to 60,000 computer installations. In 1965 we had approximately 270,000 people directly working with the computer--either vendors, manufacturers, or users. These figures are expected to increase to between 900,000 and a million by early 1970's and these are just programmers and professionals in the field. We had 45,000 operators in 1965. Expectations are to 80,000 to 100,000 by 1970. So you can see the demand that we are not meeting. We've got to meet this somehow and, the junior colleges is the best place to meet the demand. I don't feel that we can produce systems analysts because we can't train systems analysts in a two-year program. We can't train scientific programmers in two years. We've got to be realistic about what we can train, and this is a business commercial programmer, and an operator. I think we can do a good job at that and I think that is all we can do. What are we going to be doing in area three at Dallas County? Area three, you remember, are those people who need the use of computer in their disciplines. We are starting in the Spring semester the teaching of FORTRAN, which is a formula oriented language more adapted to scientific approaches. We will be teaching this on a program and instruction basis in our beginning mathematics, engineering, drafting, and electronics classes. We hope to be able to accomplish this in approximately four weeks outside the classroom and tied together in two or three sessions in the classroom, and then immediately have them start programing in this language. We hope to meet approximately 3,500 to 4,000 students a year and get them trained in a language that they can use in the solution to their problems. Simulation with management games--in the mid-management programs we are planning on using management games where we can simulate business. We have two or three of these programs now at the college and are trying to get these running and then put into the mid-management curriculum. They can make use of a computer and simulate two or three years activity in 10 to 15 minutes and see what the results of their decisions are in this. In the electronics laboratory we are using an Electronic Circuit Analysis program which simulates circuitry and allows electronic students to use it in that manner. In drafting, we do not have, but hope to have within a year, a plotter where we can do blueprints and drawings by computer in the drafting classes, because this is being done in industry and we feel that our drafting people need to be exposed to what can be done. We have a remote terminal right now. It is called a CRT terminal, a Cathode Ray tube that looks like a television receiver, where we can display information and enter information directly from this terminal. We are using it in our Student Registration procedure for add drops and record maintenance and we can also display student records on this. We hope to integrate the use of terminals in our health related programs. We already have many large hospitals today using these terminals for inquiry and output to the nurses stations hooked up directly to a computer. We feel for training these professions they need to be exposed to that, and so we hope to have this within a year or two. Finally, what are we doing in area four--this is where we are falling down on the job. Area four is an introduction to data processing principles for everyone. All we are doing now is allowing them to take an Introduction to Data Processing course as an elective, and again we are limited for capacity, we have many more requests than we can meet. What we should do, I throw out to you, is teach Introduction to Data Processing, say a three-hour class, and make it a requirement for all business majors. That is the first phase. The second phase is to make it available and strongly recommend it as an elective to all students because they are going to need it. It affects their life every day right now. They get gas bills, airline reservations, credit cards, etc., all processed by computers. They say the day is coming where you will order your groceries from your home directly, and I believe it, but I don't believe the computer is some mysterious power than can do everything because I know it. It is really very stupid, but is frightening people because they don't understand it and people are afraid of it. They think it is some kind of a super brain that does everything, and we need to give them enough education about it so they do understand. This is our goal.

Filing, Office Macnines and General Office Clerical--Katherine Yates, Lee College

In setting up the program at Lee College in Baytown, the main objective was to have an open door policy so that anyone of post-secondary age with a vocational aim to learn office skills and with previous training in typewriting could have the opportunity to be trained with a marketable skill.

A 30-hour block program of instruction is offered the students the first semester of the 11-month course. This consists of either beginning or intermediate shorthand (according to the student's previous training), intermediate typewriting, programmed business English, six weeks of programmed mathematics preceding office machines, office procedures, and six hours per week of offset printing.

With a maximum class load for each teacher being 25, individual attention can more easily be given to each student. In addition to the teacher's close observance of the students' performances, a careful analysis of each student was made by the counselors through testing. A combination of tests was given, including IQ, SCAT, Thurston, and Kuder. Even though these test scores cannot be 100 percent accurate in the true picture of one's character and potential abilities, they do give a great deal of insight into the behavior patterns of the students and make it possible for the teacher to understand better the student's needs and capabilities. After the first nine weeks of testing, observing, and counseling, the students were divided into separate but similar blocks of instruction for either clerk-typist or steno-typist training. You know everyone cannot be a stenographer!

The office machines course has two objectives: (1) To review the fundamentals of arithmetic and to teach how to apply these fundamentals to problems of business; and (2) To prepare the students to operate with speed and accuracy various business machines, and to introduce to the students through films or field trips other kinds of machines used in modern offices.

The textbook, Programmed Business Mathematics, 2nd Edition, Book I, by Huffman and Schmidt, is presented before and along with certain problems in How to Use Adding & Calculating Machines, 3rd Edition, by Walker, Roach, and Hanna.

The machines laboratory is arranged so that like machines are in clusters for group timings. All eight of the ten-key adding machines are grouped together; next are the four listing calculators. Starting with the two full-key adding machines, the students progress to the four rotary calculators, and then to the posting machines. In another section of the laboratory are four transcribing machines and four typewriters, with two long-carriage typewriters for statistical typing adjacent. One of these is a decimal tabulating typewriter in order to train students for the technical typewriting that is required in many of the industries in the Baytown area. Several of our students are working for General Electric at NASA and have a great deal of statistical typing. The employers have been cooperative in supplying sample problems for the students to use in classroom practice.

With the rotation plan, the students are on most of the machines for three weeks before moving to the next group, except for one week which is spent on the full-key adding machine before advancing to the rotary calculator and posting machine.

Students check their own answers on machine drills, but are tested with office problems every tenth lesson and are given timed drills. General concepts of business calculations and practical problems are offered the students in this course such as units on budgeting, consumer finance, averaging their monthly incomes, tax deductions, etc.

On the table in the back of the room I have extra copies for you of short cuts in mathematics which may prove helpful. There is also one copy of a Teacher's Kit on Consumer Finance. The sheet within gives information where this may be ordered. This provides a one-week activity teaching unit for problems, research panels, and films. Last year we had a very interesting and informative study presented by the students with a simulated radio braodcast via tape recorder. A guest speaker on consumer credit could be invited to the class, or the students could be assigned research on the subject or furnished scripts from the kit. A "dry run" and playback is very effective, entertaining and informative.

POST SECONDARY PROGRAM DEVELOPMENT PANEL

To broaden the scope of our general office clerical we have incorporated within the course a four-week practice session on key-punch operation. For a week the students practice the key-punch operation. For a week the students practice the key-punch drills on the simulated key-punch Selectric and Royal Tandem typewriters. This takes the place of their regular typewriting class. Then one of the instructors from the Data Processing Department lectures to the students an hour a day for a week giving them an introduction to Data Processing which includes instruction in programing invoices and payrolls. Each student is assigned an hour's practice a day on the actual key-punch machines for the next two weeks where the complete programing and card punch operation is carried out. Some of our students found that this is the part of general office practice which most appealed to them and they are now full-time operators. The practical experience from varied machines gives many students an opportunity to succeed with a marketable skill in addition to or instead of, shorthand and/or typewriting.

The office procedures course is six hours a week in the first semester and three hours a week the remaining semesters. This work period covers many fields and makes it possible to demonstrate to the students that by correlating the typing exercises, introduction to data processing, business machine drills and problems, filing, and general office procedures that all of the courses are working toward the same goal--marketable skills.

The GENERAL OFFICE PRACTICE FOR COLLEGES, 5th Edition by Pendery and Woodward (Southwestern Publishing Company), was selected to serve as both textbook and workbook.

The purpose of this course is to acquaint students with the many duties and responsibilities with which a secretary, stenographer, or general clerk-typist must become familiar. Great emphasis is placed on developing their personalities, their traits, their integrity, and other characteristics for success. Several oral reports are assigned during the year to develop self-expression and poise. These are especially effective when recorded and played back in order for the speaker to hear himself as others have heard him. Lab work in personal grooming and meeting the public in person and by telephone are stressed.

Another phase of personal grooming that is stressed is mentioned in the Trainee's Handbook which I have given you. This is given to each of the students at the pre-registration orientation. WATCH YOUR CALORIES. The students are told that overweight applicants are almost impossible to place in jobs, not only because of their first impressions, but because they become insurance risks. The students are encouraged to make use of the college swimming pool or other forms of exercise and to weigh in every week.

A comprehensive part of the Office Procedures course is the assigned report for each pair of students. As time does not permit thorough study in many interesting areas, the following topics are assigned for research, to be written up on offset masters, sufficient copies run off for handouts for each student, and orally presented to the class with illustrated poster: Use of Reference Works, Job Success--Interviews to Promotions; Role of Secretary; Telephone Technique; Receptionist's Duties; Filing Systems and Services; Mailing Procedures; Telegraph Services; Travel Arrangements; Banking Procedures; and Legal Typewriting. Before Christmas holidays, the reports are to be assembled in business report form with fly page, title page, table of contents arranged in their individual listings with parallel construction in their groupings; section dividers; and bibliography of all reports. This notebook serves many purposes in one assignment, including source of mid-term questions and future use on the job.

In the spring, the students are assigned a similar notebook as far as the arrangement, but it is based on the history of the company for whom they are working the student's individual job assignment and its description and duties; along with the organization chart of the company and sample work and company advertisements. These were on display at open house after graduation when the families and employers were invited. The reception and tour of facilities seemed to promote good rapport.

FILING--In duscussing this phase of general office training, I would like to give you a message from Dr. Art Allee whom most of you know at the University of Houston. (He and I were in the American Records Management Association together.) He wants the teachers to stress the importance of Records Management--not just filing--as executives are realizing the importance of the "keeper of records" in decision making. As Dr. Allee said, "Students need more teaching concerning the many kinds of records, their importance, their disposal, their retrieval, and to know the wasted millions of dollars in improper record-keeping--wasted vital information, time, paper, and space. Students could learn more from films--(see sample list)--or field trips to businesses where Soundex systems, automatic retrieval equipment or other modern methods are in operation."

Of course, it is important to give the basic filing rules and to teach the advantages and disadvantages of the main filing systems. In the General Office Practice book there is a filing set for a short job unit with the rules explained. Supplementary drills can also be given. Be sure that too much time is not spent on getting cards and files ready to start filing. Automation in business is relieving a lot of this today.

Mrs. Alice Halton, who is the administrator of Records Management for Tenneco Company in Houston, is to be the guest speaker for the Texas Business Education Association workshop which will be held at Lee College, November 16. All of you are invited to come at that time. There will be evaluation panels on all of these subjects that we have been talking about today--bookkeeping, shorthand, business machines, and general clerical.

SUPERVISED ON-THE-JOB TRAINING--Some of our students are now working, and classes are arranged so that by working in the afternoon, only lab time is missed. If the student in the fall proficiency test showed typing speed of from 50 to 60 and had shorthand speed necessary for the particular job demand, she became a candidate for job placement at that time. The other students are placed after they attain their skills in the 30-hour week training or at mid-term. The coordinators work closely with the employers in job placement and supervising the coordination of the classroom training with the particular need of the job. This is a challenging experience that we are willing to take with any interested person in the program. When we can give them assistance to attain a marketable skill and find their place in the business world, it is a real rewarding experience. Most of the class from last year are still on their trainee job, but as full-time employees and have received several raises since being on the job. Some have decided to continue toward a degree plan in college. And when last year's employers call us asking for more students, it makes us feel real proud.

Thank you for the opportunity to tell you about our program. I will be happy to answer any questions.

Information Communication--Sara Pynes, Wharton County Junior College

I believe that the teaching of business communication is worthwhile. If I did not, I could not go on day after, year after year, teaching this subject which involves a considerable amount of time and energy.

I know that students cannot become experts in business communications in one semester no matter how hard they try and no matter how well I teach. Because they cannot become truly proficient, I concentrate on making them critical of the business communications they see and hear and of the ones they write. I hope that this critical attitude will lead my students to continue their efforts to improve their communication capability after they have completed my course.

The first step I take in the teaching of business communications is to set up the objectives of the course. Great care should be taken in the writing of these objectives--they must be a statement of what the learner is to be like when he has successfully completed a learning experience. When clearly defined goals are lacking, it is impossible to evaluate a course efficiently, and there is no sound basis for selecting appropriate materials, content, or instructional methods. A builder does not select his materials or specify a schedule of construction until he has his blueprints (objectives) before him.

Another important reason for stating objectives relates to the evaluation of the student. Tests or examinations are the mileposts along the road of learning and are supposed to tell the teacher and the students the degree to which both have been successful in the achievement of the course objectives. Unless these objectives are clearly and firmly fixed in the minds of both the teacher and student, tests are at best misleading; at worst, they are unfair and/or useless.

An additional advantage of clearly defined objectives is that the student is provided the means to evaluate his own progress at any place along the route of instruction and is able to organize his efforts into worthwhile activities.

An objective tells what the learner is to be like as a result of some learning experience; the course description tells only what the course is about. To illustrate these definitions, apply them to the game of football. A course description might tell the learner which field he will be playing on; it doesn't tell him where the foul lines are, where the goalposts are located, or how he will know when he has scored.

The most effectively stated objective is one that excludes the greatest number of possible alternatives to your goal. Unfortunately, there are many loaded words, open to a wide range of interpretation. Consider these words: know, understand, appreciate, enjoy, and believe. Words like these have many interpretations. What do you mean when you say you want a learner to know something? Do you mean that you want him to be able to recite, to solve, or to construct? Just to tell him you want him to know tells him little--the word can mean many things.

Words that are open to fewer interpretations include these: write, recite, identify, differentiate, solve, construct, list, compare. Objectives that are written using this type of action verb will communicate best by describing the terminal behavior of the learner well enough to avoid misinterpretation.

After the course objectives are written, the course content is divided into units of study. The objectives for each week in the semester are duplicated and distributed to the students. This practice enables the student to know what is expected of him at all times.

I concentrate on teaching students the three essential qualities of business communications: clarity, validity, and favorable emotional impact. I point out the essential elements of a clear message as:

1. One in which each sentence, each paragraph, and the message as a whole is well organized; one in which every element is in the place where it will seem logical and right to the reader; one in which attention has been paid to coherence so that the message seems a unit and not a group of disconnected parts.

2. One which is written economically; one which includes every word needed to make the message clear, valid, and effective, but not one more.

3. One which is appropriate in word choice, length, and format for the purpose and for the reader for which it is intended.

4. One which is effective because it creates the proper impact on the reader--the impact which leads to acceptance or action or to whatever change the writer hopes to make in the reader's thinking.

I will not be satisfied with anything less than a student's best effort, but I will encourage and reward every improvement no matter how slight.

I will do all this as well as I can, but I will not be discouraged if progress is slow. I know the magnitude of my job and recognize the probability that my students' appreciation of what they are learning will not come until after they face the problems of business communication on their future jobs.

A COLLEGE PRESIDENT LOOKS AT OUR PROGRAM AND INSTRUCTORS

Presented by Dr. A. B. Martin, President
Amarillo College

Thank you very much. First let me say, I appreciate your being here this morning. I realize the difficulty of getting up early on Saturday morning, and eight o'clock is early on Saturday morning. During the other days of the week, it's not so early, but on Saturday, it's pretty early.

Knowing that you want to get down to business, and that you want to hear something that makes it worthwhile for you to be here in attendance, I shall proceed.

We are talking about business occupations, office occupations, and training. As Mr. Thomas has mentioned, it is my job this morning to give you some observations from the administration's viewpoint. I want to lay a sort of background for my remarks first. To introduce my historical background, I want to tell you a story. It is an old story that comes down to us from ranch history in the Plains. It has to do with a foreman and the crew of men who were building a fence across the prairie. They would dig a hole, place a fence post in the hole, and then string the wire and proceed to the next post, and so forth until they had finished the fence. All of a sudden they realized they had dug one of the holes in the wrong place. So the foreman said to the men, "You will have to fill up that hole again." So, after a while one of the men came to him and said, "We can't get all of the dirt back into the hold." This was important because they wanted to leave the ground level. The foreman looked at the hole that they were trying to refill and saw that the dirt was in a mound. He scratched his head for a while, then his face lit up and he said to the man, "Well, I tell you, you'll just have to dig the hole deeper."

American education is in the same position that these cowboys were. I don't know whether we are accomplishing anything. So, it is a pleasure to have this opportunity to talk to you about an area of education which I think is becoming the most important area in the whole educational spectrum. So you can consider this talk as something of a pep talk. I hope you will get encouragement from it, and that you will go back to your institutions and enter into your work with a new verve, a new vitality, and a new enthusiasm because I think if education in America is to survive, it is going to survive because of the work that you are doing. People like you are willing to branch out into a new approach to education, and a new approach to solving the problems of the individuals with whom you are associated on an educational basis.

If you look back, you see that our whole educational program comes from an historical source which organized an educational program for one particular purpose only, and that purpose was to raise up a generation of learned men. It might be interesting to you to realize that women weren't even considered educable at that time. Go back and study Jefferson's Plan of Education. You will see that he considered women incapable of learning to the extent that men were. He thought women should be trained to receive the guests honorably in a man's home, to see that the fare on the table was palatable and tasty, and to play an instrument or two for the entertainment of the gentlemen visitors. If you look back into the historical background of education in America, you get some very interesting answers.

Let's take a particular look at office education. Did you know that in the early 1700's Benjamin Franklin took a look at the business that was going on in the Colonies, and he thought that America--the Colonies--would soon be the center of commerce in the Western World. He realized that nothing was being done to train people in business fields, that there were no educational programs for them. Every bookkeeper, every salesman, every merchant, every clerk, got his learning from someone else who was already in the business. There were no schools for them to attend. So Benjamin Franklin looked up the hill and saw what was then the beginning of the University of Pennsylvania. He went to see the directors of the University of Pennsylvania, and said we need courses in business education, in office occupations. He said we need trained people to man our business in the new and growing industry in America. And do you know what they said? They said it was not respectable. They said that they couldn't include "that" in a course of study for the people going to the University of Pennsylvania. "We're here to raise up a generation of learned men so that they can guide the destiny of this Nation and delve with those great problems which need the concentration of the mind. We can't dilute the curricula with business courses." This was back in 1749. So poor old Benjamin went back to his office. The more he thought about it, the angrier he became. He said, "We're producing the income that we're having to carry up that hill to those fellows to operate that school. And yet they don't want to give us anything back in training." Do you know what he did? He organized a new school with business courses in the curriculum to teach such lowly things as penmanship and the inscribing of one's name in letters which would stand for all time on the contracts binding one person to another in business transactions. And after he got the school operating and it had developed into an institution which had more students in attendance then the University of Pennsylvania, the Directors of the University said, "We must incorporate this institution into our organization." So, there began the first consortium between institutions. Today we look at these institutions as the Wharton School of Finance and Business in the University of Pennsylvania. I give you this little story to show you that it is not new to be considered a not purely acceptable segment of education. I want to talk to this point a little later on because I think it is the most important issue facing America today in education.

Now, to understand office education and office occupations training, we must be able to answer some questions. First, we have to answer the question of why office occupations training, or occupations programs with a vocational emphasis are necessary. Well, to answer that question, we go back into the historical background that I have tried to develop which points out the fact that we have a conflict between the subjective placement of educational training at the intellectual level which is more closely related to the seven liberal arts than it is related to the practical application of knowledge into a working situation. This may sound a little academic, so I am going to retrace and restate it. In this country a battle has been going on for hundreds of years between two areas of education. One deals primarily with the concept that we train the mind and fill it full of general education, and then it can handle any practical situation it confronts. This concept is geared to a society in which those who do the thinking and the talking and so on do no manual work. Here is the crux of the whole problem. Today I hate to use the term "intellectual" because it has so many connotations that are not germane to proper interpretation. The old idea was that the intellectual should do no manual labor. He should not soil his hands, he should not become involved in work, because his calling was to think.

So, the first educational program grew out of what was then known as "Philosophy." Then they began to add other segments of liberal educational arts. Did you know that each of them was considered "vocational" and had to go through a whole argument to become accepted as one of the liberal arts? This whole process went on until they had seven of them. The seven liberal arts became the basis for all education. Then, as technology increased, the industrial revolution came along, society changed, and they began to see a different need for training, and they began to open up the professions. Professional education in the beginning was training through a guild system. It was not even in the collegiate curriculum. If you go back into the University of Salerno and those old universities in Cambridge and Paris, you will find that the professions were not even included. When they decided they needed to train doctors, they had already accepted the fact that they needed to train ministers and friars and preachers, and so on. You know, universities wouldn't accept medicine because they contended it was vocational and immoral. "A man has to use his hands to mix medicines and stuff, so we don't want that in the curriculum. It is vocational." And every subject that has been added to the study of mankind has had to fight this battle for respectability.

I was visiting the University of Arkansas a summer ago, and I ran into an example of how exclusive this type of mind set can become. The University of Arkansas was able to get a contract for the training of people for the Space Center, the NASA Space Center in Houston. It involved a course of study which was a very close integration of physics and chemistry and biology. These three sciences were compacted into a new sequence with no time elements in terms of semester hours, and so on. These students were post-Doctoral. They had been trained beyond the Doctoral degree in this course, which consisted of about the equivalent of another two years of work all compressed into about a fifteen months training program. Do you know what the students were discussing when I met with them? They were trying to find out where in the U. S. they could obtain college credits for these courses. Can you imagine that? It is the only program of its kind in the country. It was vital and necessary. It has been a tremendous success in producing a trained person to go into the Manned Space Center and do a job. They thought that this was a curriculum that should be established in other universities and colleges and provide a basis whereby people could be trained for the space age. And they were confronted with the fact that they could not find any other university that was willing to give credit for this work. Tradition comes out of a system which was established historically and in its original state has a reason for being, but as the years pass that reason becomes obscure and obsolete because of changing conditions in society; yet, it is so fixed that it continues to exist.

American education has just been digging the hole deeper. It really hasn't been creating too much that is new because it has been too closely tied to the traditional pattern. The young people today have a point when they complain that the educational system of today is becoming obsolete because it does not give them the knowledge or information necessary to go out into society today and become effective in dealing with the problems. Here I think they are right. Every time we introduce a new study or a new program it has to fight this battle of respectability and acceptance. Then it has to fight the battle of remaining true to the objectives for which the program was established. The first thing you know, the tendency is to redesign the program so that it becomes another intellectually oriented program with no practical objectives. It loses its effectiveness. That is why the Vocational Education Act of 1963 stated that the funds could be expended only for courses and programs that led to job competency and proficiency in work. Programs which were intended to lead toward the Baccalaureate Degree could not be funded. This is an example of the battle to keep the vocational programs from turning into academic programs.

I have been in education a long time and I have seen many new programs translated into the semester-hour harness. This is something else. The semester hour organization is a time sequence. It is not related to learning at all. Yet, many people think that because students are in a course for eighteen weeks a semester and they attend class for three hours a week, that they are learning. Well, time alone has nothing to do with whether or not the student learns. Yet, when we start a new program such as vocational office occupations, the first thing you know someone tries to apply the semester hour sequence.

My whole objective here this morning is to try to get across to you the idea that vocational office education is designed to train the people to become proficient and to hold jobs in business offices. For goodness sake, don't let the program get diluted and distorted by trying to fit it into the traditional academic arts and science strait jacket because this will kill it. With office occupations we are trying to develop a program that meets a tremendous need. Business and industry need trained people. People who go into these fields need the training. So it has a double-purpose objective--to solve the needs of industry and business in terms of trained personnel to man the offices, and, also, to train people with salable skills so that they can obtain jobs. And the sooner and the faster you can teach them the skills, the better.

A COLLEGE PRESIDENT LOOKS AT OUR PROGRAM AND INSTRUCTORS

In East Texas years ago when I was Deputy State Superintendent with the Texas Education Agency, a principal of a school told me this story, which I thought was wonderful. He said, "Education and students are like youngsters going down to the dairy to get their milk." This was years ago before we had all these fancy wax cartons that we have now. Boys and girls were sent to the dairy with cans to get their milk. The principal said that children come to school to fill their learning buckets just like the people go down to the dairy to fill their milk buckets. Some of them have gallon cans, some have five-gallon cans, some have quart cans. They come to school to get their learning buckets filled. The sooner you fill their buckets and send them on, the better. Now, remember that, because in office education, the sooner you can fill their learning bucket, the better. You are going to have five-gallon minds, one-gallon minds, and one-quart minds. But the one quart-minds can hold certain jobs in office occupations and do them well. So, fill that one-quart mind and send it on to work. When the five-gallon bucket comes along, it can contain enough information to program a computer, although it may take a little longer.

Last year during a business occupations conference on October 13, 1968, Dr. C. C. Colvert presented some figures which I think are analogous to the point I wish to make. He said that out of 500 students of high school age, 300 will graduate from high school which is 60 percent. He stated further that 150 of the graduates will actually go to college and enroll in a senior or a junior college. One hundred of the 150 who entered college will enter the sophomore year of college, and 60 of the 150 who entered college will complete two years of college. Forty of the 60 who complete the second year of college will go to the junior year of college. Finally, only 20 of the 500 will graduate from the senior college.

At a meeting in Chicago in 1946, the Prosser Resolution was adopted which stated 80 percent of the population was not being reached by the traditional curriculum then existing in the colleges and in the high schools, and if something wasn't done about it, the government was going to set up all sorts of training programs over the country because the public school systems, the colleges and universities would have registered an absolute failure. This is back in '46, and now it is '68. So what is happening? We have MDTA. We have all sorts of Job Corps centers. We have all sorts of government training programs. Why? Because in the colleges and universities we have refused to accept the responsibility to reach this 80 percent of our population who are not now receiving higher education of any form. If you really want to get shocked, go back and read the census figures for 1960. You will find that only 52 percent of the population of the people of this country are literate to the extent that they have completed a high school education.

So, in these office occupations programs we have an opportunity of reaching the great multitudes as I like to refer to them, the great mass of people who need to be trained, who need vocational education programs.

A COLLEGE PRESIDENT LOOKS AT OUR PROGRAM AND INSTRUCTORS

We can spend a lot of time talking about the purposes and objectives, but first we have to answer the question, "Why office occupations programs with a vocational interest?" I have tried to answer this question to an extent, but I want emphasize again that we need these programs because people need jobs and business needs people.

POST SECONDARY PROGRAM DEVELOPMENT PANEL

Stenographics, Secretarial and Related

Presented by Betty Friesinger, Chairman
Department of Business Administration, Odessa College

A young friend of mine once told me that he hated to hear a women speak because she was so anxious to talk she would not even tell a joke. You notice the gentlemen on the program have each time given us a little funny, but not so in my case, I'm ready to get on with my talk.

It is a privilege to speak to a group of people who are working in an area in which we all feel so strongly dedicated. As Dr. Martin pointed out, education for productive work, a salable skill and an appreciation for usable knowledge brings no apology on my part, for I am grateful to share in this unprecedented growth of vocational office education.

I'd like to first give a little history of our secretarial-stenographic program at Odessa College. It seemed that for several years there was no separation of vocational from academic courses. Then, about five years ago, we started on a somewhat different plan. We knew, of course, prior to that time that we had terminal students. But, we didn't place too much importance on them, except to recognize that they did keep our enrollment high. In the fall of 1964, an extra instructor was hired. She had the necessary educational background and also, she had had experience as a secretary in several types of business activity. We prepared a brochure and mailed it to high school seniors. We had a tremendous response. We enrolled, however, only 26 students in this special program. The overflow of students was registered in the regularly scheduled secretarial, stenographic classes--as had been done in the years past when no emphasis was placed on terminal classification. The 26 students were taught exclusively by this special teacher. She started them in shorthand and typewriting at the highest level they could handle. She taught them business machines; some of them had had a little training in business machines in high school. She took them on to other machines which they had not used. Duplicating processes, filing procedures, voice writing, and Business English were included in the curriculum. We did give them 15 hours of college credit after satisfactorily completing the semester's work, because the people in the area where are do like to feel that there is college credit attached to these courses. This group of 26 students became a very closely knit group as they worked together in all these classes. They were very congenial and the camaraderie of the group became very evident. They gave a Christmas party for their instructor, and they invited me as a second thought. Those who did not register for the second semester, were awarded a four and one-half month certificate. Most of them, however, continued with the second semester's work. In this semester, the same teacher taught them their next level of shorthand and typewriting. They enrolled for the business correspondence and secretarial procedures class. Their fifth course was selective--accounting, introduction to business, business law, economics, or data processing--some of them took speech. This selected course was the only one they had with another instructor.

Well, let me tell you what happened after the first year--we had a vacancy in that teaching assignment. This teacher had seven preparations--at least seven. She was teaching the various levels of shorthand with an assigned lab, she was teaching the various levels of typewriting with an assigned lab, and she was teaching business correspondence and secretarial procedures. So our special teacher went on to bigger, well, at least, better things. The pace was set, though, and we were again fortunate to get a capable replacement. We thought this was an excellent plan, and for two years we turned out some very capable young ladies as secretaries. They had no problems in finding employment and they had no problems in keeping a job once they found it. One of the girls from the first year's class is secretary to Jerry Anstead, Dean of Technical and Vocational Education at Odessa College. At the end of the second year, we again had a vacancy in this teaching assignment. It was evident that this was too heavy a load for one person. Then, too, for some reason our counselors were not informed--perhaps, or they didn't quite understand the "special" program, where one instructor taught the same students all day long. You can imagine, also, having one obnoxious young lady and keeping her for a full day's activities. Most of the students, however, were very congenial and good workers.

After the second year, we went back to the old way where the counselors registered students in the desired courses, conveniently (I guess convenience is the word for it), because terminal students were mixed with the other students who were perhaps going for a baccalaureate degree. One reason that I thought this one-teacher plan was superior was that it cut out duplication of learning activities from one class to another. Repetition was used only for emphasis and the teacher knew exactly how much emphasis was needed for the intensive training program. We had enrollment increases each year and now we have five full-time and four part-time secretarial-stenographic teachers in our programs. We offer a four and one-half month program, a two-semester stenographic program, and a two-year secretarial program. These programs are outlined on the first two pages of the handout. You will notice that the four and one-half month program has been marked as intensive office training, followed by the nine-month stenographic program. The second page describes the eighteen-month secretarial program.

Our objectives are simple enough. We train students so they achieve the specialized knowledge which is required for occupational compentence in the secretarial and stenographic areas. We try to encompass their concept of personality which would be necessary for them to be successful in business activities. Along with this, we endeavor to meet the needs of our community. Apparently, this is at least partially accomplished because oil companies, as well as other business pay their employees' tuition and fees to attend many of our classes. The fees for students in the CPS review courses are paid almost entirely by company checks. We at Odessa College are eager to try a variety of business courses and not be shackled by traditional stereotypes. Occasionally courses are offered which do not materialize but at least we learn what is not wanted or needed by our community. We keep a list of the call-ins concerning requests for specific areas of study, and after several requests for the same course had been made, the evening college or technical-vocational office sets up the course, prepares a mail-out, and another community-oriented course begins to materialize.

My assignment here today is to describe methods of teaching to obtain competence in the stenographic-secretarial program. The lenght of time, of course, prohibits too much of this, so to narrow it down, I have given a few techniques that we have used successfully, rather than methods of teaching.

I realize, of course, that I bear a 19th Century view, but I believe that we cannot accept anything less than excellence in office personnel performance. The office is a place of decision-making and competence is paramount. One of the most appalling errors, I believe that we can assume, is to suppose that our students who are not pursuing a college degree are incapable of the highest standards of intellectual performance. Excellence is where you find it, and you find it where it is demanded. A dedicated teacher must be enthusiastic for excellence and work at it, and work at it, and work at it. If an instructor of a class doesn't work with the conception of excellence, it can be only by accident that excellence is born. For it cannot come from shoddy, slovenly performed, educational fare, and I think we have to be up and doing day after day.

Knowing that it is always easier to criticize than it is to suggest ways of improvement, I checked with members of my staff on ways to improve teaching. These techniques are included in the handout. One of our secretarial teachers, Mrs. Behrens, gave me the four-point reading plan that she uses. It is just a way of getting everybody involved, and she can do it! She is so anxious to do all that can be done during the class hour that she uses this four-point reading plan. In reading the first time, all students read shorthand together with the teacher setting the pace; the second time they all read together a little faster; the third time they all read together as fast as possible, at individual rates of speed. The fourth time an individual person reads and, of course, as fast as she can.

The seven-point plan that she gave me as one of her techniques is an exercise for students to help them with whatever individual bit of training they need on shorthand outlines at a particular time.

Then, another thing that she thought would be of interest is the sure-fire device to kill the enthusiasm of the most enthusiastic shorthand class. You will notice the author is Charles Zoubek. (Mrs. Behrens has had this in her file for several years.) If you have read it, you might enjoy rereading it. During the first few days, make every effort to convince the students that shorthand is difficult, and if they thought they were taking a snap course, they have another thought coming. Make shorthand tough. Well, in the paranthetical remark that follows there is given the correct procedure to be used. Notice the very last comment, "If you use these devices conscientiously, you can be sure you will not have to teach shorthand next year; no one will enroll in your class."

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On the next page that follows in the handout, Mrs. Hurst prepared a rotation plan for her business machines class. It may not be exactly the time element you require for these machines, but perhaps you might compare your plan with this one. At the bottom of the page, we have some evaluation suggestions. We have included typing techniques for office practice. This is one way of perhaps getting more action out of your students in order that you can go a little bit faster in helping them to work up stencils. If you have not tried timed techniques you might want to consider this exercise.

On the last sheet, the green page, Mrs. Behrens describes a secretarial research project which she has used in her classes. It gives the students a chance to make some community contacts, because they have to interview a secretary employed in the area that holds the greatest interest for them. If you haven't used a research project, this might give you some guidelines for the requirements.

Another question I was asked to answer, "How do we determine if competence has been accomplished?" I wish I knew. But, so far, we can determine this only by the growth over and above normal growth expectancy. Year after year our department has continued to grow as I mentioned earlier. The continued number of requests received from business and industry wanting to hire our students. Frankly, this is one of the problems. When businesses offer our students a high salary after one year of study, the students find it difficult to refuse employment. So, our second year program is, as a result, quite small. But we hope that we can encourage those who have a "larger bucket," as Dr. Martin termed it, to stay with us.

Another area where we need to do more, is our follow-up on students. Follow-up would have been easy if we had continued to earmark a group, as specifically, the terminal group. The crucial factor is the important of establishing an ongoing relationship between ex-students and our college. When an individual never hears from a school after he leaves, he is not inclined to turn to that school for further education. We need to do more in this respect.

In conclusion, and on the same note that I began, the major use of education in the world is in the world of work. If education is not used, it has lost some of its value. The place in the working world for secretarial and stenographic ability, as we all know, is tremendous.

Thank you.

Supervisory and Administrative Management--Pat Plocek, El Centro College

Thank you, Betty. Maybe we might want to come and apply for a job with you. You're so enthusiastic about everything.

We do have grandmothers at El Centro, in fact in our first year of operation, our average age was on the other side of 25. We are very proud of those people who come back to school. Their accomplishments are great. My program is somewhat different, I suppose, than some of the others that have been presented. It is geared for those young women who desire to become executive secretaries, or administrative secretaries, or office supervisors, or office managers. I am going to give to you the objectives along with the things that were written for the administration. The first objective is that we are going to teach them about administrative office management and the formal definition is "to provide an understanding of the administrative approach to office management, relating the human and technical science of office operations, as preparation for first line office supervisory positions and alternate advancement into office and administrative management." Now, our second objective is to give them some basic skills, you know, so they can get a job. Technical training is provided for the student in the areas of advanced typing and shorthand in the secretarial procedures, accounting, office machines, and business communications. Our third objective is to give them some theory, some business knowledge.

A comprehensive, introductory analysis is made of all aspects of business including organization, methods of operation, faults of ownership, business functions, and problems of management. Because our graduates, even though we might put them through a very excellent scale development program, could not just walk into a business firm and be an executive secretary, we give them on-the-job training along with this program for which they do receive college credit. Let us think back just a minute when we were in college and when we were taking our dear 30 hours of education and then we took our student teaching and remember the comments that were made. This is one of the reasons that we have on-the-job training. You wouldn't take your child to a doctor who had not been an intern or resident. That would be ridiculous. Southern Methodist University offers cooperative education in virtually every school, in journalism, and practically every program in its school of business has some type of cooperative education.

Yesterday, we heard a bit from Jim Hill from our school. I'll just toss this in to show you a little about changing technology. Jim has a machine in his department which has a print out rate of 1,100 lines per minute. How many lines can you type in a minute?

I am sure you have noticed that I have two curriculums. One is secretarially oriented. The students who come into this program come to us having already completed beginning shorthand or one year of high school shorthand, or one semester of college shorthand, and their typing. Now we have no further skill requirements although many of my students do have work experience in their background, that have had secretarial training in college. Of course, the more skills they have, the more likely they are to get into the program.

Now the second program is more basic in nature. This is geared primarily for women who come to us who have already established themselves in business, many of whom are already in a supervisory capacity. They already carry the title of executive secretary or office manager or some other title that means a group supervisor. Now these people, of course, have no real need to go back and pick up shorthand, for example, so they can spend their time in economics or business law or any of the other courses that we have. Some of them pick up courses outside of their department, like medical terminology, so on and so forth. Now I extremely encourage any young woman who comes into the program to follow the first curriculum, because first of all you have got to get a job. You can't prove yourself unless you get a job, and their secretarial skills are invaluable to them. I have two or three who are following Curriculum Two, who are younger, and one is in accounting and one is in data processing working only with equipment. The students meet with me in Office Supervision 132 Seminar, and the next semester Office Supervision 133 Seminar, and the second year Office Supervision 233 Seminar, and so forth. This is a two-hour seminar which meets one day per week and I conduct this seminar. It is in this seminar that we cover office management. During the first year I use Minner and Keeling's Office Management Text and, if you are familiar with that book and have looked through it, you know it is kind of difficult. It's kind of difficult for me. We enjoy it. We use it as a reference book. I talked to one of my dropouts one day this week and she said, "I've read it all." I was real happy about that. This is where we learn how to put together office manuals and how to revise office forms. We evaluate office equipment. We learn how to set up an office. We use the class study approach. We could say that in the class study approach, it is just sort of an extension of classroom discussion.

How do I get these students to participate? How do we keep them from it? In the first year, they do very little goal setting as far as what they are going to do. They do a project each semester that relates to their business firm. Other than that, they have little to do with how the class is run the first year. However, they do all of the talking the first year. They get together in little clusters of two or three people and they work on their cases and they discuss their cases which have been prepared ahead of time. They present them. They select their own leader and present it to the class. They go through their questions at the back of the chapter just as though it were a classroom discussion. They each bring something from their firm or from a periodical, a current periodical, each week and we have a show and tell. I get kidded about that. Then I preview, just like you preview your next lesson in shorthand, the next chapter that we are going to have. I have a whole drawer full of handouts that our secretary did for me this summer. She spent about a month just working for me and so I just pull out my chapter and take it to class and hand these out. During the second year, they do a little more self-direction, as far as their classroom activities are concerned.

How do we teach human relations clearly? I'm not sure. I am just using the best books that I can get my hands on and we are doing this on just sort of a round table discussion basis and it is working beautifully thus far. We continue to bring things from our jobs, we continue to discuss our job problems as they come up, and then in the spring semester, we cover the process of management but this is not principles of management. We call it a different name but they use the same textbook. This is one of the department managers secretaries, she needs to understand the department's functions. So, just an overview of management, so she can understand why her boss is doing what.

I'm going to say just a few words about our cooperative program. We have about five different programs in our division of business. In our other divisions, we have other programs that are working in our community in different ways. Our nursing program has students in hospitals, but they don't earn money. So there is a different situation. The electronics program is working with T&I. T&I has hired some people, and we are training them, but that is not even on-the-job training. So we have a lot of different things going at El Centro in this area. James Hill mentioned yesterday that our programmers are going to receive on the job training here during the last semester. We are cooperating with our parametics department in medical office occupations. I understand that they will have a cooperative program there. We have a one-semester cooperative program in credit and collection. We have another program in restaurant management that is also cooperative. Then, of course, there are all beginning programs, mid-management, and office supervision. I suppose that if we were going to say that is the difference between the two; mid-management does cover retail, wholesale service, as well as industry. So, they have boys and girls in office occupations. Now, the difference in this program and mine is that their program is geared toward second, third, and fourth levels of mid-management, whereas mine distinctly says first-line supervision. It is the group supervisor of the executive secretary type of individual. Now, most of these students are taking three or four courses in addition to the seminar. Most of them are working on a part-time basis, twenty hours per week. If they want more hours, they cut down on their course load, it is as simple as that. Most of my first year students earn around $1.75 per hour, as you know, $1.60 is the minimum wage. Most of them receive merit reviews periodically, and raises. Most of my second year students earn around $2.00 an hour. Some are earning much more than that. I have one student who is earning $335.00 for less than full-time work per month. I have one student last year who was earning almost as much as I was. We do have both a day seminar and an evening seminar. My evening seminar is where my grandmother is, and I am particularly proud of this group. Their accomplishments are great. When they get into the school, they are scared to death. There is just no comparison. And anyone who has taught an evening school, they are just fantastic, they really are. These people are working full-time because of the problems in getting some graduate study. We like to help people who already have some college in their background into this evening seminar, 15 hours of college into the college seminar.

We do have a training plan. I was going to make transparencies and then I decided I didn't want you to see the things I made, so I didn't make any. This is a letter of training and when a secretary types it, she runs it off on a letterhead. I give this to my business people. It is not the line for line training plan like we use in distributive education, but it is a letter stating the program intent. They write back to me what the program is supposed to do. What the student is going to learn about their files, what special skills they are going to utilize, and then a statement regarding salary. Then a statement regarding the opportunity for advancement. When I made out the sample, I made it out for no other reason but the fact that I hated to take an executive's time to type a letter of training for me. So I made it out, all he has to do is look over it, fill in the blanks, and have his secretary type it. We deal with some mighty important people. It is just an honor to work with them, that's all I have to say about that. We do work with our counselors in all of our programs. We have a great big, thick handbook for all the programs in El Centro. This is just so our counselors will have some information about the kinds of people we want into our program. We want the prettiest girls, the girls with the most skills. Our employers do review the students four times a year. By the way, when I do my coordination, I just try to schedule my coffee break with them.

In the second year I utilize more of what the mid-management people are using and have something that looks somewhat more like administration. Inevitably, during the second year, these kids have found themselves a nitch in the organization, and they are in a position of responsibility. I graduated from North Texas with a BBA, plunged into job hunting as a lot of you did probably.

Our goal at El Centro is for our kids in this program to be earning approximately the same amount of money and have approximately the same kind of positions as those students with a four-year degree from North Texas who have not had the on-the-job training. Our employers do consider the two years' part-time as just two years' work experience. And two years education. We are accomplishing this. When you get ready to start your coop program, talk to Mr. Thomas about it. I guess I might say all I know I owe to DE people. Mr. Fuller, Mr. Thomas are DE people, they work with three mid-management coordinators who are fantastic. Thank you.

Typing and Related--Angie Vail, Hill Junior College

In 1967, 21,000 educational institutions offered courses in typewriting. Eight hundred and twenty thousand classroom typewriters were available in the United States, and each one of these typewriters was used by 4.6 students. This included the evening students as well as the day school people. Last year in the United States, we had 3,800,000 students who were formally enrolled in typewriting courses, as such. The population increase from 1960 to 1965 in the United States was 5.6, but the enrollment increase in typewriting in those years was 22.3 percent. So more and more people are taking some typewriting. It is something we've had a long time. But yet we need to think about it, and not think, we'll spend more time on some of these newer programs, when this is a basic course. Last year, in elementary school, we had 50,000 people take typewriting. These were children in the eighth grade and younger. In junior high we had 625,000 that learned how to type, or at least they took it. In high school, we had 2,350,000 students enrolled. This was classified especially in Texas, because we could pick up our vocational students from the people who took it for personal use. Of these 2,000,000 students, 1,050,000 said they had a vocational intent. In the colleges and universities, 50,000 students are enrolled in typewriting, 45,000 of those had a vocational intent. Now, we get down to the junior college, and 600,000 people last year took typewriting. Five hundred and seventy-five thousand had a vocational interest. They then separated the adult and evening school, and said 125,000 people took typing at night, 115,000 of these were vocational. Most of you probably had night programs, like we do, and typewriting is one course that is offered almost every semester. So I would assume that part of it also could be in the junior college program. I end up putting a professional touch to it. In other words, I really don't believe this grandmother in my night class that says the only reason she is taking typewriting is so she can write her children letters, or her grandchildren letters, or something like that, because nearly always they will end up somewhere in an office on a part-time basis if not a full-time basis. So, the personal use isn't always the acceptable idea.

My topic is on typing and related subjects. In twenty minutes I can't cover everything that is related to typewriting. But we can teach it in one course. We get many students that maybe take only one semester of typewriting in our school, or who take none, because they had two years in high school and they already type 80 or 90 words a minute, and they want something else. They are through with typing courses. They don't want to do what we have in typewriting, they would rather take other subjects. Especially if they are one-year terminal students, then they want to finish, and they don't want to waste time in typing. So, we must teach typewriting in other courses, such as transcription, office practices, secretarial practice, business correspondence, and report writing. In these courses, we talk about the basic ways to set up certain things that we are going to have in these subjects.

How do you obtain confidence? I dug out Blackstone, and he says this, "The typewriter is the greatest motivator that has been introduced in the classroom." Now, I used to believe this, but since we got all that data processing equipment, I don't know if it is the greatest motivator anymore. Frankly, I doubt that it is, yet as a beginning machine, probably so. A student has to believe they can learn how to type; the teacher must be enthusiastic. This is very important. Many of us have taught typewriting for so long, I think maybe sometimes we lose our enthusiasm about typewriting, and we would rather go into something that has a little more glamour.

Constant motivation, however, is very important. Learning is much more rapid when the teacher is interested and motivates her students, and they are excited about the subject. Of course, we know this, but many times we lose this motivation. I know I catch myself doing this. I'll plan a subject in great detail--something I haven't done before, and then I get to the typewriting class, and as I walk in the door, I decide what drill we'll use today. And I am sure that probably all of you have been guilty of that.

On the planning of how to obtain confidence, of course, the first thing we are going to talk about is covering your keyboard. I read a number of articles and I didn't realize that there was such a discussion on what letter to hit first until I got ready to give this talk. I finally came up with this conclusion. I think it was Lloyd that said the best introduction to the keyboard is what you like the best and you can be enthusiastic about, whether you start with the home row or some other letter. You are going to cover the whole thing eventually, anyway. I couldn't go along with the idea where they did the whole keyboard the first day, and then went on from there. But the gyst of it again is your own personal preference. Whether to use manual or electric machines. I'll tell a story. When I took Homemaking in high school, I went to a fairly progressive high school, and I am really not as old as I look, but I can remember that the first six weeks, we sewed on treadle machines that were brand new because our teacher was sixty-five years old, and she felt like some day we might have a treadle sewing machine, so we had to do six weeks on a treadle machine before we could go to the electric. Now, in your community, the progressive businessmen have electric machines. Don't you think you ought to have them also. Now we could discuss this. Do we begin the beginners on manuals. In night school, we have no manual typewriters. And frankly, I'm glad. Because I don't like to type on a manual. Yet, you will find many teachers that will disagree. And of course, that is your prerogative, if it works for you, that's fine.

On the drill part, which is going to come early in typewriting, repetition of itself has no value whatsoever. But planned repetition, where we know the student's problem, then we get to make progress. It is not so much what the student does to the practice material does to the student. So plan your practice material because there is a lot of drill repetition. There was a time when the typing teacher would circle every error that the student made on everything that he typed in class and analyze. Now why did you make that mistake, and let's talk about it. Many times, I think they spent more of the period talking about the errors the student made, than letting them practice on the typewriter. There was a time when we came to the point that we ignored all mistakes on drill work. We said they will eventually take care of themselves. We are more or less going back to the idea that error correction and studying errors, the typing teacher is not exactly ignoring the mistakes today, but at least we are trying to decide what caused them. Error analysis is supposedly important at this point. Some insight as to why the students make these mistakes in their typing. Most of your textbooks have really good drills, to correct certain types of errors. You can get all types of drillbooks that can do that also. Learning a skill depends not only on practice, but also on the understanding of why we are making an error, and how to correct it. Give individual instruction at times on the types of errors the students are making. There is an excellent article by Dr. Lethenberry, called, "Errors--Their Cause and Correction." Go from simple drills to complex drills. Don't let your practice exceed thirty minutes. Everybody says this. Yet, I have a typing class at night that lasts for three hours. They can hardly hold their hands straight when they get out of there. But at least vary the practice every thirty minutes if you can't do anything else. Work on stroking. The most important goal in typewriting development according to many authors is to develop a good stroking technique. What does stroking involve, again you all know this, but maybe you are like I am, it is a good idea to think about it. The choice of the right finger first of all, the direction of the reach, the quality of the reach, whether it is strong or weak, the speed of the finger movement in making the reach, and striking a key and releasing a key, the feel of the appropriate movements. Specialized drills for the right hand, the left hand, certain fingers, the alphabet, the numbers, the speed and accuracy, all of this is important. You are going to spend a lot of time on drills in typewriting.

Work on pacing. Type slow, type at a medium speed, increase your speed, and then go back to your control level. Build speed, determine your present skill, and see if you can gain six or eight words, and then go back to a control level. One authority that I read when I was thinking about this talked about the importance of drill on certain parts of the machine. Because if a beginner has a correct stroke, there is not a bit of difference between a beginner's stroke and the advance student's stroke, and where they lose all the time is on the carriage return and on the tabulator, and all these other parts that they can't remember where they were. So, drill on the backspace, if nothing else. They're going to use that key quite a bit. So, spend some time in drilling them on the parts of the machine. Have timed writings on something they have had before, and also on some new information. Give some timed writings for a sustained period. I can remember when I was in college, they said don't every take a timed writing that lasts thirty minutes. Your students are not going to type for five minute periods when they are on the job. So, what is wrong with them taking a thirty minute timed writing now and then. Now, I am not saying to do it every day. But every now and then.

Some typing tips: Let the students stop right in the middle of a timed writing to make a correction; at the very beginning when you are teaching erasing. All right, when they get on the job, they will make speedier corrections, or when they get to production, in the next semester, they will learn to make corrections at a faster rate of speed. Drill on numbers; I know one typing teacher does not teach the top row and I think that person should lose his job as a typing teacher; T. James Crawford said this

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"One of the most important factors in developing skills in data typewriting is the sincere belief on the part of the teacher that students can learn to type numbers. Too often, inability of the typist to master the top row indicates a negative or skeptical attitude on the part of the teacher. With the increase of more and more statistical typing, numbers are more and more important." Teach it as though it were the home row. Because you never know when the students are going to go out and for eight hours a day, they are going to type numbers.

Don't forget production. I can remember, I was in one of Ruth Anderson's classes, I won't tell how many years ago, and she was harping on "When you get out of college, I think you ought to do some kind of research." All the research that is done on straight copy is fine, but what about production rates. I've heard it so many times, and yet in the last ten or twenty years, or at least in the ten years, there have been more research projects done on production typewriting. In other words, if you can type 95 words a minute, but you don't know the letter forms, and how to put out the forms, and how to work in an office, well, do we want this person? So production must be taught in the classroom. Typing is not just timed writings. It is skills plus production ability. There is very little correlation between general intelligence and typing skills. They said any idiot can learn to type and hit the right numbers, or the right letters; I don't know about the numbers.

But there is a very close correlation between general intelligence and production typing ability. Then again, better students will be able to produce mailable copy. Your goal on speed and accuracy and production--let's go into that for thirty or forty minutes if we have the time. Problems should consist of more than routine typing. They should include varied practice. Problems definitely should be completed under pressure. You have had the student who was an excellent person in your classroom, but maybe you didn't time her quite enough, and when she got on the job and under pressure, she came apart. So give them pressure in the classroom; they need it. Consider the total performance of the student. Correlate your teaching practices with the business practices. In the last Business Teacher, those of us who have been double spacing envelopes all these years are going to have to change our minds. We are going to have to tell our students whan an Optical Character Reader is. I think they should know. We can't stay with the same idea that we have had for years and years and years. Good production; there are some excellent tests recently published in your BEW; Ruth Anderson and Margaret Johnson have put them out. These are in a series. You may not like them exactly but it gives you a few ideas. Anyway, work on timed production.

I found in looking at college catalogues, there is a trend to have a double period in typing. Two hours, maybe meet five hours a week; you can meet one day for two hours; one hour the next. Give your students a job situation if you can. Use the supplies and stationery that business uses. Grade on mailability. Teach them organization. There is a monograph by Crawford on production typewriting. You can learn a lot by looking through it.

How do you determine if any competence has been acquired. Use your typing manual for some recommendations on how to grade on mailable copies, speed requirements and so forth. Definitely read the teacher's manual that goes with your book. Make surveys of your graduates. Last year we made a survey over the last three years' period of our graduates. We found a number of things. We asked them all kinds of questions. In fact, we sent this survey to everyone who had been enrolled in one business course, because in many instances we could not take the business majors from those who had other majors, and we asked them to tell their specific major. They told us a number of things that we need to include in typewriting, in secretarial practice. Your students can tell you what you need. Get acquainted with your former students, and see what they think you should have taught them. It may be an isolated situation, and you don't need that at all. But it may not be; there may be some big gap that you are leaving out. Keep in touch with your local businessmen. In Hillsboro that is not very hard to do. But in a big community it might be. We can't place all of our graduates in our community. We have to go outside. Still, look and see what the businessmen want. They won't always know, but they can give you some idea.

Read. How long has it been since you have seriously thought about your teaching of typewriting. Or are you working on these new courses? Compare with other teachers at meetings like this one.

Basic skill evaluation, again, you do what you want to, but I think production is very important. On production, I'll mention these just briefly. I've read dozens of articles, and you have read them, too. They have been coming out for years on how we are going to grade on words per minute and so forth. The net words per minute with a ten-word deduction from the gross words typed, we've been doing this for a long time. The gross words per minute. Many of your newer typing books have been coming up with this. At least in the first stages of typing, the majority of people recommended, the number of words divided by the number of minutes of writing. No deduction of errors to start with, and then we begin with a minus two, and maybe we go a little bit further, it depends on which teacher you are talking to. Correct words per minute. You merely subtract the number of errors from the number of words the student made, and what is left is their number of correct words per minute. I never have found a disciple of that idea. I'd like to talk to one sometime, and find out what they think about it. This new performance rate which is really not too new, but erase and make your corrections as you go along. No deductions for a corrected error, but a minus 10 for each error the student failed to find. Many teachers teach on this basis. Then this new mailable words per minute, we have a new teacher in our school this year that is a former student of Dr. Ballsley. I don't know, I get kind of confused with the charts, because I've never tried it before. But yet you might at least like to read about it. It is not anything new. This method penalizes the typist for an error, by the time it takes to correct the mistake. The plan was developed of course, through research, where Dr. Ballsley determined how long it takes the average student to correct an error. For example, in college, the average student takes from 19 to 22 seconds to correct a mistake, on straight copy, with no carbon. It takes 27 seconds to correct one original with one carbon. The student is not penalized for his corrected error in his production timing that he takes, but for each uncorrected error the number of seconds is added to his time. A chart is used by the student and the teacher. If the error is uncorrectable in that letter, then that letter is thrown out. The letter is not acceptable. The time however for a correction that could be made, is merely added on. That gives them the total number of words that they typed per minute, and so forth, and then we come up with what she calls "mailable words per minute." This method seems to be gaining acceptance, in intermediate and advanced classes. From what I can understand, Dr. Ballsley uses it in beginning classes, too. Read about it, at least, try it; it is new. It's something that you could consider. Now, what is the best for you? This is my opinion--I believe the best is what you can use and what you believe in that you can be motivated with, and you can put out students who can get a job and who can produce what is needed on that job. In other words, if you can use the methods for grading words per minute that was used fifty years ago, and you are getting results, then who is to say it's wrong?

Allan Lloyd who is supposedly known for his new ideas in typewriting and so forth, wrote an article in the Business Education World in March 1968. It is called "Typewriting Future." He tells us supposedly what we are going to come to in the next few years. I don't know that we can do this with the old ideas that most of use part of the time. "Typewriting in the Future," and that is what it is called, will be everywhere and he says this will be at the turn of the century. Typewriting will be initiated in the fifth and sixth grade. It will be expanded in the eighth grade; it will be vocationalized in senior high, and it will be proffesionalized in post-secondary schools. Now, this means that we will not teach the keyboard. They learned that in the fifth grade. Can they learn it in the fifth grade? Probably so. We have had a number of people who have learned to type in grade school, last year fifty thousand. So, I would assume that they wouldn't teach that many people without results.

Instruction will be individualized in a college classroom. Instead of working in cadence with other learners, the typewriter trainee will work alone as he progresses through a course of programmed instruction. After last summer when I worked through about six PI courses for IBM I don't know if I like it or not, but they do have merit. They will contain not only an automatic typewriter on which it is impossible to make an error but also recording equipment, speed setting pacers and computer assisted diagnostic instruments. Right there in front of me the machine will tell why I am making this mistake and what I should do. The teacher will only be a supervisor. The teacher will operate the equipment from the prospective of his analysis of the learner's knowledge and capacity.

Now, can we teach typewriting that way? We can't unless we change. In other words, we are used to staying up in the front of the room and saying, Everybody high the letter "A". We will work harder with individualized instruction. We all know that from courses where we have these rotation schedules where each student is doing something different, you go all period long from one place to the other and when the bell rings you are exhausted, yet each student has done quite a bit of learning. The same thing may be true with typewriting. You are going to have twenty people on twenty different machines, the computer telling them something, and I am not saying that this is going to happen in every classroom, but it may come to that or at least a part of it.

The point that I want to make is we must grow with the subject of typewriting, it is an old subject but it is changing. Make your changes according to what is necessary in business. You will be left behind if you don't. The only thing sure about teaching business subjects is that they will change! I'd often thought to myself--wouldn't it be nice if I had majored in history and I could use the same notes every year because it already happened and I would not have to change. I teach business law for example, and the class has new books this semester that were just published. I am already telling them that this is wrong.

Keep up to date in typewriting in the same way that you keep up in other courses, and I think you will be able to put out better, productive students.

Pilot Program in Typing--Nellie Thorogood, College of the Mainland

I guess I am one of those people that Angie's talking about that is a little bored with teaching a traditional typing class. In the philosophy of our school, we are dedicated to experimentation and innovation, and then I used to use the phrase that we are an experimental junior college, until someone asked me, "Does that mean maybe it won't work?" I said that it really works; we are just going to try some different ideas. Last year in the spring it became available to us the information that each department would have at least one experimental course in the fall, and this should be in the area of a basic course, one that was the onset or the beginning of follow up courses on which we could improve on the teaching of these courses.

First of all, we are doing several general experimentations at the college (general in the sense that they apply to the entire college). One of these is to write behavioral specified objectives for each course. This is in order to let the students know exactly what we expect of them before they start the course. The first day we orient them to our situation, i.e., what they are going to do. They are committed to complete all of these minimum objectives in order to maintain the grade of "c". Our grading system presents the second broad area of experimentation. We do not distribute "D's" or "F's". The third general area of experimentation is that we are experimenting in each department. In some areas where we can combine experiments, we try to allow everyone to be involved in what we are doing.

Now, with this in mind, our experiment in the office occupations department was in beginning typewriting under my development. My underlying objective, I suppose, was to glamourize the typing course, because as you know, a beginning typing class can be boring. Traditionally, beginning typewriting has been a drab, dull, "cookbook" type course where you come in and say "here is the keyboard, the textbook, and let's drill." All of the factors involved in the experiment will work so you must keep in mind that this is a pilot program. At the present, I am right in the middle of the semester and don't have the conclusions. I only have my hypothesis, and my procedures which I want to share with you today. The main reason for wanting to do this is so that you may gain some ideas that you can try in your school. I think much of the audio-visual equipment (both hardware and software) that I am going to use is very applicable to the other areas of our vocational training.

The following is the proposal, procedures, and lesson guides for the experimentation that I have done in beginning typewriting.

PROPOSAL FOR
EXPERIMENTATION IN BEGINNING TYPEWRITING
FALL, 1968-69

In recent years there have been many innovations and inventions that, if employed properly, make it possible to improve the teaching and learning processes in beginning typewriting at the junior college level. Numerous experiments have been performed to determine the effect of one or two innovations on a particular group of students, but to date there have not been experiments to show the difference, if any, in the teaching-learning process when several of the available hardware, software and new methods are applied to a particular group of people.

Statement of the Problem

The problem is to determine significant differences, if any, in the skill development (both straight-copy and production), the techniques, and the factual knowledge learned when the following factors are introduced to a beginning typewriting class at College of the Mainland during the fall semester, 1968-69: introduction of the keyboard by the use of transparencies and the overhead projector; introduction of the keyboard within seven class periods; loop films; tachistoscope and skill development filmstrips; listening tapes; video-tape; and delayed use of the textbook (delayed for two weeks).

A secondary problem to be studied will be to observe the application of two-hour block time classes three days per week to beginning typewriting classes at College of the Mainland during the fall semester of 1968-69. This is in contrast to the traditional 50-minute class meetings for five days per week.

Purpose of the Problem

The experimentation will evaluate the effect, if any, on the skill development, student interest, on factual knowledge learned, on techniques, and on student attitude at the beginning level of typewriting. The results of the experimentation will be measured at the end of six weeks, at the end of nine weeks, and at the end of the semester. It is intended that through this research the instruction of typewriting at the beginning can be improved.

The traditional beginning typewriting class at the junior college level has attended classroom instruction for 45-50 minutes per day, five days per week. A portion of this time was devoted to lecture or instructional procedures while the remaining time was devoted to laboratory practice, skill development and problem solving. All sections of beginning typewriting at College of the Mainland during the fall semester of 1968-69 will meet three (3) days a week in a two-hour block of time. This time block will provide both instructional procedures and laboratory practice. As a secondary problem to the experimentation, the purpose for the use of this time block is to allow the student the opportunity to have enough time in a give setting to receive instructional knowledge and to apply it to his work without having a 24-hour period of time between each class meeting.

Assumptions

The following factors are assumed in relation to the above stated problems and purposes:

1. All students have had one or more of the following:
    a. No previous typewriting instruction
    b. One semester of high school typewriting
    c. One course of non-credit typewriting

2. All students can learn.

3. Traditional methods of teaching typewriting are inherited. These methods have been successful but are not immune from improvement.

Hypotheses

It is projected that the following factors will result from the experimentation:

1. The effect of audio aids, visual aids, and video aids in addition to printed media on the transmission of information and skill development will be significant at the six-week and nine-week evaluation periods.

2. The effect of audio aids, visual aids and video aids in addition to printed media will increase the students' interest and attitude throughout the course.

3. The experimental class will be better equipped to compose at the typewriter by finishing the text material before the Christmas holidays leaving the last three weeks of the semester for review and composition.

4. Beginning typewriting teachers should be able to teach more in a shorter period of time with the use of the various aids. In long range planning this will mean that instructors can teach more in the semester length or take less time to teach the beginning typewriting courses.

5. The techniques of the experimental group will be improved, especially the ability of the student to keep his eyes on the copy rather than the machine. This will be accomplished by delaying the use of the textbook until two (2) weeks after the semester has begun.

Procedures

The major portion of this experimentation will be in the format for the teaching-learning work. This will be accomplished by the use of an experimental class taught in a different atmosphere from the traditional classroom procedure and a control class which will be taught in the traditional manner.

The variables to be employed in the experimental class are as follows:

1. Introduction of the keyboard through the use of transparencies and the overhead projector. These transparencies will be developed by the instructor to match the needs of the course and the mode of typewriter that is being used.

2. The entire keyboard will be introduced within seven (7) class periods.

3. Loop films will be developed by the instructor and used to show the following procedures of typewriting:
   a. How to Identify the Parts of the Selectric Typewriter
   b. How to Set Margins
   c. How to Insert the Paper Into the Machine

   (These procedures are traditionally introduced by instructor demonstrations in front of and above the class.)

4. The EDL Skill Builder projector and filmstrips will be used in class and for lab practice for a period of six (6) weeks. After this period of time it will be the student's option to use the filmstrips for practice and skill development purposes.

5. Listening tapes that correspond to the introduction of the keyboard will be used for lab practice and skill development. Normally the student listens to the tape and looks at the copy in his textbook. In the experimental class, the student will listen to the tape while watching the copy on a transparency on the overhead projector.[1]

6. The following procedures of typewriting will be shown by instructor demonstration:
   a. Parts of the Selectric Typewriter (supplemented by a booklet furnished by IBM)[2]
   b. How to Set Margins
   c. How to Insert Paper Into the Machine

Procedures for the Experimental Class

SEPTEMBER 16 M
1. Introduction to class
2. Elements of Selectric Typing
3. Introduction to the parts of the Selectric Typewriter
Use the loop film made by instructor
4. Paper insertion
Use the loop film made by the instructor
5. Introduce keys -- ASDF JKL: -- type practice words
6. Introduce keys -- E H -- type practice words
(Introduction of the keyboard will be made by the use of transparencies and the overhead projector. The practice words will be given on the chalk board, or the screen.)
7. Preparation in getting ready to type
8. Elite type
9. Diagnostic Spelling Test

18 W
1. Brief review
2. Introduce keys -- I T -- type practice words and sentences

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[1] South-Western Publishing Company, Teaching Tapes for Lesson 1-25, College Typewriting.

[2] "Your IBM Selectric Typewriter," International Business Machines.

Also for practice the students will listen to the corresponding tapes for that particular group of keys. While listening, the students will look at the screen to follow what is being dictated to them on the tape.

3. Use of shift keys
4. Introduce new keys -- R N O -- and practice
5. Introduce new keys -- W C U -- and practice
6. Introduce new keys -- G M P -- and practice

20 F
1. Review
2. Introduce new keys -- Q Y X -- and practice
3. Introduce new keys -- Z B , -- and practice
4. Introduce new keys -- V ? : -- and practice
5. Practice with the use of the EDL filmstrips
6. Sentence Guided writing practice
7. Counting the number of words typed -- GWAM

Second Week

23 M
1. Review of the keyboard and practice
2. Simple tabulation and columns, use of the tab keys
   Use a loop film made by the instructor
3. Paragraph typing
4. Practice from the filmstrips, transparencies, and chalk board
5. Introduction of the numbers -- 1 3 7 -- practice

25 W
1. Review
2. Introduction of the numbers -- 9 5 -- practice
3. Introduction of the numbers -- 2 6 / -- practice
4. Introduction of the numbers -- 4 8 0 -- practice
5. Introduction of the __ and the hyphen -- practice

27 F
Practice, drill work and review
Emphasis on techniques

Third Week

30 M
1. Review and warmup
2. Introduction of -- " ' $ -- practice
3. Introduction of -- # & ( ) -- practice
4. Introduction of -- % * ½ ¼ @ ¢ = + -- practice
5. Practice on all the symbols through the use of the filmstrips, the chalk board, and the tapes.

OCTOBER

2 W
1. Review
2. Informational Memo -- this is the first day that the students have used their textbook so emphasis will be placed on "eyes on the copies."
3. Memo in Block Form
4. Memo with Subject Line

			5. Skill Development 6. Timings
	4	F	1. Warmup and skill development 2. Tab review 3. Number drills 4. Filmstrip in lab practice 5. Typewriting from handwritten duplicated copies
Fourth Week	7	M	1. Review 2. Memos 3. Horizontal Centering 4. Skill development 5. Text #1 -- written and timed writings
	9	W	1. Review 2. Proofreaders Marks and test 3. Skill development 4. Personal note 5. Personal note with quoted material
	11	F	1. Review 2. Composition at the typewriter 3. Drill on odd-size paper 4. Type on postal cards (send for free material) 5. Skill development
Fifth Week	14	M	1. Review 2. Vertical centering 3. Memo with Subject Line 4. Skill development 5. Composition at the typewriter
	16	W	1. Review 2. Personal letter in Block Style 3. Addressing an envelope 4. Response patterns
	18	F	1. Review 2. Short reports 3. Composing at the typewriter
Sixth Week	21	M	1. Review 2. Business letters 3. Guide for erasing Again use will be made of the loop film made by the instructor

	23	W	1. Review and skill development 2. Letters 3. Rough draft and more proofreaders marks 4. Folding a letter
	25	F	1. Skill development 2. Timings 3. Letters 4. Short letter production 5. Evaluation I
Seventh Week	28	M	1. Review and skill development 2. Drill on tabulation 3. Tabulation problems
	30	W	1. Review and skill development timings 2. Tabulation 3. Alignment of words
NOVEMBER	1	F	1. Skill development and timings 2. Tables in Reading Positions 3. Drawing lines (vertically and horizontally) with the typewriter
Eighth Week	4	M	1. Review and skill development 2. Letter with tabulation 3. Table with 3 columns 4. Article with tabulation
	6	W	1. Review and skill development 2. Guides for word division
	8	F	1. Review and skill development timings 2. Carbon Packs Again a film loop will be used to show the development of and insertion of a carbon pack. And erasing on the copies. 3. Erasing with carbon copies 4. Letter with tables
Ninth Week	11	M	1. Problem Typing
	13	W	1. Skill Development and timings 2. Review
	15	F	1. Evaluation II

Tenth Week	18	M	1. Skill development and review 2. Centering poems and Composing 3. Composition at the typewriter 4. Timings
	20	W	1. Roman numberal alignment 2. Typing an outline
	22	F	1. Review and skill development 2. Page-end indicator page 3. Unbound Manuscripts
Eleventh Week	25	M	1. Review and skill development 2. Unbound manuscript review by typing from a magazine article
	27	W	1. Review of outline 2. Art in typing for Thanksgiving
DECEMBER Twelfth Week	2	M	1. Bound manuscript 2. Review and skill development 3. Footnotes -- use of ratchet release
	4	W	1. Typing a bound manuscript 2. Correction techniques (Crowding and Spreading)
	6	F	1. Review and skill development timings 2. Multiple carbons 3. Manuscript typing
Thirteenth Week	9	M	1. Tabulation with columnar headings
	11	W	1. Proofreaders marks and review 2. Rough draft 3. Composition at the typewriter -- a letter
	13	F	1. Letter production 2. Composition at the typewriter -- a short manuscript
Fourteenth Week	16	M	1. Typing a manuscript that student has composed 2. Alignment on Forms (Type a Check) 3. Skill development and timings
	18	W	1. Review of tables 2. Review of manuscripts 3. Review of letters
	20	F	1. Letter Production -- short video tape of techniques

JANUARY Fifteenth Week	3	F	1. Review of skill development and techniques 2. Use of video TV to show how techniques have changed during the 2-week break, if any.
	6	M	1. Review of letters 2. Letter production 3. Composition at the typewriter -- a personal note
	8	W	1. Review of skills and timings 2. Tabulation review 3. Tabulation production 4. Composition at the typewriter -- a business letter (rough draft and final form)
Sixteenth Week	10	F	1. Review of skills and timings 2. Typewriting from magazine article -- condensing (a resume) 3. Composition at the typewriter -- a manuscript (short)
	13	M	1. Typing final copy of manuscript
	15	W	1. Overall review and timings
	17	F	1. Short production on tabulation and letters 2. Final spelling test

FINAL EVALUATION

Procedures for the Control Class

SEPTEMBER First Week	16	M	1. Introduction to the class 2. Diagnostic spelling test 3. Elements of Selectric Typing (Through the use of a demonstration typewriting and the booklets provided by IBM.) 4. Paper insertion (demonstrated by the instructor and then followed by the students) 5. Position at the typewriter 6. Introduce keys -- ASDF JKL; -- type practice exercises in the text 7. Introduce keys -- E H -- type practice drill in the book The introduction of the keyboard in this class will be made by the use of a wall chart and a pointer. The instructor will show the reaches,

have the students practice on them, and then practice on the drill work given in the text.

8. Preparation in getting ready to type
9. Elite type

18 W
1. Brief review and warmup from the book
2. Review the parts of the typewriter after students have reviewed the Selectric booklet
3. Introduce new keys -- I T . -- practice drill in the text -- page 7
4. Shifting for capitals and practice
5. Introduce new keys -- O R N -- and practice from the book

20 F
1. Review and warmup
2. Introduce new keys -- W U C -- and practice
3. Ribbon control on the Selectric typewriter
4. Typing from teacher dictation -- page 13, text
5. Sentence guided writings -- page 14, text

Second Week

23 M
1. Review and warmup
2. Introduce new keys -- P G M -- and practice
3. Typing from dictation
4. Introduce new keys -- Q Y X -- and practicd
5. Backspacing

25 W
1. Review and warmup
2. Introduce new keys -- B Z , -- practice
3. Introduce tabulation and type simple tab problem
4. Practice on tab and skill development
5. Introduce new keys -- V ? -- practice
6. Paragraph typing

27 F
1. Review and warmup
2. Type from teacher dictation
3. Paragraph typing and timing. How to figure the number of words per minute typed.

Third Week

30 M
1. Skill development
2. Technique practice
3. Paragraph guided writing
4. Typing from teacher dictation

OCTOBER

2 W
1. Technique practice -- tabulator and carriage return
2. Skill development and timings
3. Introduction of numbers -- 1 3 7 -- practice page 32, text
4. Simple tabulation and procedure for setting tab stops for columns

	4	F	1. Review and timings
			2. Introduce new keys -- 9 5 : -- practice
			3. Simple tabulation
			4. Introduce numbers -- 6 2 / -- practice
			5. Tabulation and carriage return practice
Fourth Week	7	M	1. Review and warmup
			2. Introduce new keys -- 8 4 0 -- practice
			3. Tabulation
			4. Skill development and timings
			5. Introduce new key -- hyphen and underscore -- practice
			6. Self-Improvement practice
			7. Check-up timings at this point to compare with the experimental class
	9	W	1. Review and warmup
			2. Introduce new keys -- $ ' " -- practice
			3. Spacing rules -- page 42, text
			4. Typing from dictation
			5. Problem typing -- information memo
			6. New Keys -- # & ( ) -- practice
			7. How to make an exclamation point
	11	F	1. Review and warmup
			2. Skill development and timings
			3. Memo in block form
			4. New keys -- % -- practice
			5. Memo with Subject Line
Fifth Week	14	M	1. Warmup and review
			2. New Keys -- * ½ ¼ ¢ @ -- practice
			3. Technique practice
			4. Timings
			5. Memo with Subject Line
	16	W	1. Review and warmup
			2. Skill development
			3. Dictation
			4. Timings from handwritten copies
			5. Review tabulations
	18	F	1. Review and warmup
			2. Skill development and timings
			3. Memo review
			4. Memo on horizontal centering
Sixth Week	21	M	1. Review and warmup
			2. Horizontal centering
			3. Skill development
			4. Proofreaders marks

	23	W	1. Warmup and review 2. Written test #1 and timing check (includes proofreaders marks) 3. Short production on memo 4. Horizontal centering review
	25	F	1. Review and warmup 2. Drill on typing outside the margins (margin release key) 3. Skill development and timings 4. Short production on memos 5. Evaluation I
Seventh Week	28	M	1. Review and warmup 2. A personal note 3. Skill development 4. Personal note with quoted material 5. Short drill on odd-size paper
	30	W	1. Warmup and review 2. Timings and skill development 3. Typing a postal card to send for free information 4. Drill on centering vertically
NOVEMBER	1	F	1. Warmup and review 2. Skill development and timings 3. Memo with a subject line -- page 66, text and other problem measurement
Eighth Week	4	M	1. Warmup and review 2. Personal letter in block style 3. How to address an envelope 4. Skill development
	6	W	1. Warmup and review 2. Personal letters 3. Skill development and timings
	8	F	1. Short report 2. Warmup and review 3. Themes
Ninth Week	11	M	1. Warmup and review 2. Problem typing -- page 74, text 3. Composition at the typewriter 4. Skill development
	13	W	1. Warmup and review 2. Skill development and timings 3. Composition at the typewriter 4. Short personal letter production
	15	F	1. Evaluation II

Tenth Week	18	M	1. Warmup and skill development 2. Problem measurement for letter and short report 3. Self-Improvement
	20	W	1. Warmup and skill development 2. Timings 3. Business letters
	22	F	1. Warmup and review 2. Skill development and timing 3. Business letters -- modified block and mixed punctuation 4. Rough draft and more proofreaders marks
Eleventh Week	25	M	1. Review and warmup 2. Technique of folding a business letter 3. Drill on erasing 4. Skill development and production in correct copy
	27	W	1. Warmup 2. Timings 3. Mailable Copy 4. Art in Typing
DECEMBER Twelfth Week	2	M	1. Review and Warmup 2. Skill development 3. Drill on tabulation 4. Tabulation problems
	4	W	1. Warmup and skill development 2. Timings 3. Short letter production 4. Tabulation 5. Alignment of words
	6	F	1. Warmup and skill development 2. Timings 3. Tables 4. Drawing lines (vertically and horizontally) with the typewriter
Thirteenth Week	9	M	1. Warmup and skill development 2. Letter with tabulations 3. Table with 3 columns 4. Article with tabulation
	11	W	1. Warmup and skill development 2. Timings 3. Guides for word division

	13	F	1. Warmup and skill development 2. Short production 3. Carbon packs -- insertion and correction 4. Letter with tables
Fourteenth Week	16	M	1. Problem typing
	18	W	1. Testing
	20	F	1. Letter production and video tape of techniques
JANUARY Fifteenth Week	3	F	1. Review and skill development including a video tape of techniques after a 2-week vacation 2. Poems and composition 3. Composing at the typewriter
Sixteenth Week	6	M	1. Warmup and review 2. Roman numberal alignment 3. Typing an outline 4. Page-end indicator
	8	W	1. Warmup and review and skill development 2. Timings 3. Unbound manuscripts
	10	F	1. Warmup and skill development 2. Unbound manuscripts by typing from a magazine article 3. Review of outline 4. Composition at the typewriter
Seventeenth Week	13	M	1. Bound manuscript 2. Skill development and warmup 3. Footnotes -- use of the ratchet release
	15	W	1. Typing a bound manuscript 2. Correction techniques (Crowding and spreading) 3. Multiple carbons 4. Manuscript typing
	17	F	1. Review of proofreaders marks 2. Columnar headings in tabulation 3. Composition in tabulation 4. Alignment on Forms (Type a Check) 5. Review for the final

FINAL EVALUATION

Procedures for Evaluation

A. Six (6) Week Evaluation and Measurement

1. Speed of typing on straight-copy material for one (1) and three (3) minute timings (includes two (2) timings at each level).
2. Accuracy according to the number of errors made.
3. Technique (considering attitude, posture, eyes-on-the-copy, stroking, and others). (See Check List)

B. Nine (9) Week Evaluation and Measurement

1. Speed of typing on straight-copy material for one (1) and three (3) minute timings (includes two (2) timings at each level).
2. Accuracy according to the number or errors made.
3. Rough draft composition at the typewriter.
4. Factual knowledge of typewriting, the typewriter, and related problems.
5. Production performance on personal letters and memos. The students will type for 20 minutes and will be evaluated according to the number of problems typed.
6. Techniques at the typewriter. (See Check List)

C. End of the Semester Evaluation and Measurement

1. Straight copy speed on three (3) and five (5) minute timings.
2. Accuracy according to the number of errors made.
3. Rough draft composition at the typewriter.
4. Letter production
5. Typing of a short report
6. Typing of a short table
7. Objective Test on Factual Material

   Combination test for the final evaluation course to be completed within two hours.

8. Evaluation of the techniques at the typewriter. (See Check List)

JOB RATING SHEET (Confidential)

For ______________________________

Please check the proper column as it applies to the listed item:

	Below Avg.		Average			Above Avg.	
	1	2	3	4	5	6	7
WORK HABITS							
1. Proper use of all available office equipment (typewriter, transcribing machine, calculators, etc.)							
2. Economy							
3. Organization of facts for reports and correspondence (speed)							
4. Proper maintenance of office and equipment.							
5. Systematization of office routine (paper-handling procedures, orderliness)							
6. Anticipation of office needs (Projection of work load)							
7. Proper proofreading of all work (accuracy--typewriting)							
8. Perseverance, industry, thoroughness, determination (stickability to task)							
9. Accuracy as manifested in English, arithmetic, filing, etc.							
PERSONAL TRAITS--HUMAN RELATIONS							
1. Sense of fitness (attractively groomed, poised, cleanliness, neatness)							
2. Regularity of attendance (punctuality)							
3. Sincerity in speech and actions (ability to express thoughts in refined language)							
4. Dependability, reliability (following instructions, observation of rules)							
5. Adaptability to new situations (judgment, alertness, tactfulness)							
6. Enthusiasm for work (initiative, cheerfulness, sense of humor)							
7. Loyalty to employer (building good will)							
8. General Attitude toward people, life (cooperativeness, honesty, fairness)							

Comments:

POST SECONDARY PROGRAM DEVELOPMENT PANEL

Our business education profession is in the age of transition, an age of revolution. This is a most fascinating time for teachers. Certainly it is a challenge to teach our subject matter in the most interesting way possible. Typewriting is a communication tool of the future. It is our responsibility to make the teaching and learning of typewriting as efficient and interesting as possible. As a teacher of these vital subjects (vital to our future), I strongly recommend that you become involved in your teaching--teaching efficiently, teaching in an interesting manner, and teaching for quality. If this is accomplished, the students will learn--after all, this is our mission.

"PARDON . . . YOUR IMAGE IS SHOWING"

Presented by Everett Fuller, Director, Secondary Vocational
Office Education, Texas Education Agency

Pardon . . . Your Image Is Showing, or your slip is showing, whichever way you want it. Of course, your image appears in the form of your students, in the community--during the year in which they enroll in your program, if you are in a cooperative program, the year following the completion of the program if you are in a pre-employment type program. Your image will show. There is no other segment of the educational field which reflects so immediately the result of your activities in the classroom. As a result, we have a tremendous need for vocational office education teachers with a sense of commitment.

The modern business teacher in all areas of the field has an important task. No one in the field of total business education would deny that very simple statement. However, the extent of the fulfillment of that task would be too difficult to determine for all the teachers in all of the schools in the American society.

While it is relatively easy to enumerate the standard prerequisite for doing the task of teaching, mere enumeration will fail to make evident one prerequisite that is both elusive and powerful. This difficult to quantify factor is a sense of commitment.

Commitment involves a deep understanding of the purposes for which we teach. There is no evidence of indifference or apathy to what it is we have selected to teach. One educator from an emerging oriental nation, when asked what his impressions were of American schools, said, "I was surprised that education is taken for granted. Teachers do not seem to have very good answers for the question, 'Why do you teach--typewriting, bookkeeping, or why do you teach English, or why do you teach history?' Furthermore, students do not seem to know why they are taking certain courses, or a particular course. Their answers lacked thoughtfulness and they lacked a sense of thinking about the value of learning that particular course of study." Our visitor from abroad was disappointed with the results he received. Have we in the United States come so far along the road of education that we unthinkingly assume our responsibilities without establishing in our own minds our purposes for being in the classroom?

Commitment involves a firm, a perceptive, and intelligent assessment of our students and their success. How often are we guilty of knowing only the names of our students? And sometimes, not even this. A teacher with a true commitment can tell a story that is vivid with illustrations and interpretation of each student's struggle with the subject matter that the teacher is presenting. Can you pull from your class rolls, at random, the name of a student and begin a discussion of that particular student's strengths, weaknesses, his anxieties, his motivations, his aspirations? In relation to the subject that you are teaching? A teacher who is committed to his professional task has such an interest in his students as learners that he becomes a repository of personal information about every one of them.

Commitment involves a purely professional approach to the decisions that must be made in teaching. A teacher with a commitment can develop fully his intellectual pattern discriminating between what is good and what is poor. For example, our teacher with a commitment has studied materials thoroughly and makes choices of instructional material on a rational, relevant basis, not on some fickle, whimsical basis, such as which textbook representative called last, or who bought the most coffee, or some similar basis. Our teacher with a commitment has studied thoroughly the teaching-learning process and is constantly revising his perceptions of that process. He can make sound judgments as he reviews recommendations, the questions of others, the findings of research studies. A fully professional approach requires an open mind, a mind that will not automatically close out ideas because they are unfamiliar or because they play havoc with the notions that have been at the base of our thinking for decades.

Finally, the teacher with a commitment is one who is totally unimpressed with the so-called earmarks of success. If professional recognition should be bestowed upon him, it is a by-product of his efforts to give central attention to central concerns. The teacher with a commitment never loses sight of what is most important. He is fully aware of helping students realize their potentialities. The good teacher finds the job of teaching exciting, thrilling, and exhilarating. No one has ever given more eloquent voice to that statement than William Lyon Phelps, who stated,

> "In my mind, teaching is not merely a life's work, a profession, an occupation, a struggle; it is a passion. I love to teach. I love to teach as a painter loves to paint. As a musician loves to play. As a singer loves to sing."

May I add that the art of teaching--like the art of painting, and the art of music, can be developed. It can be cultivated. It can be refined. And perfected only by the same hard, almost dull, exercise and work, which makes a virtuoso out of a naturally talented violinist. May I add, too, that the passion to teach will in time become for the true teacher a searing desire to teach well, so well that his teaching will electrify the mind and heart of another professional teacher. In that, every teacher fulfills himself.

A good teacher is indeed a blend of intellect and emotion, of head and heart. To state the exact ratio, even after a detailed analysis, would be very difficult. This much we can bank on, however. The good teacher is one who straps a golden mean between the two. He is one who in teaching knows reasonably, but sensitively, what to do with his head; knows sensitively, but reasonably, what to do with his heart. This teacher is one with with a sense of commitment.

So much for the professional part of this presentation. Now I will get down to brass tacks. Some of you people know me far better than others. Some of you have been involved in this program from the beginning. With apologies to those of you who have heard part of this previously, I'm still very fond of it, and this will properly identify Mr. Fuller in the minds of you new people. My office is immediately adjacent to distributive education. We used to be back in a big hayloft type room on the fourth floor. There were something like 16 professional people, plus their clerical and stenographic help all in there with the accompanying clatter of their typewriters, adding machines, telephones, and one thing and another; and we had to talk with principals and superintendents who stopped by. This was little bit of a mess. However, we have very satisfactory offices at the present time. But at this time my desk was here, and here was DE four feet away. My secretary was here, and here was DE's secretary four feet away. I was soon to surmise that there was a certain amount of chitchat shot back and forth between the girls, and I entered into this occasionally. We used to have a standing deal going along with the DE girl. She would be working away, typing, humming a few bars of Gilbert and Sullivan, or the Desert Song, or the usual type music. She would sing two or three phrases, and we would see who could sing what the other couldn't, and so on. I had a very excellent secretary, Charlotte. She was one of these Austin girls with whom we are blessed because they are working putting their husbands through the University. And eventually, she moved on up and out as he finished his degree.

The DE Girl came up with a funny little poem one day, and it will serve very well to introduce Fuller to you newcomers. Mind you, she zipped this out in about five minutes. The poem went:

There once was a fellow named Fuller
VOE was the name of his trade

You've never met anyone crueler
Or anyone any less staid

He was helped by a sweet girl named Charlotte
This villain most cunning and bold

She frequently blushed almost scarlet
At the off-color jokes that he told.

He yelled at his poor secretary
Her every mistake did he find.

He teased, scowled and acted so scary
That the poor girl went out of her mind

There is a moral to this ugly fable
The revenge of dear Charlotte was just

"PARDON . . . YOUR IMAGE IS SHOWING"

She pasted him up in a label
And Xeroxed him into the dust.

How many of you people have actually seen our new publications? Copies of each of all four went to your junior college a year ago. Go in and rescue them out of the departmental chairmen's shelves. And if your departmental chairman doesn't have them, go in and rescue them out of the Director of Vocational Education's shelves. And if he doesn't have them, go in and scare them out of your Dean's shelves. These are the results of extensive studies, and are suggested curriculum guides published by the U. S. Office of Education. There is a Suggested Curriculum Guide for Computing and Accounting Occupations. It is tremendous. A Suggested Curriculum Guide for Stenographic, Secretarial, and Related Occupations. This is actually the first one developed. It was developed by C. E. Leslie and Associates, which may ring a bell with you. A Suggested Curriculum Guide for Typing and Related Occupations. A Suggested Curriculum Guide for Filing and Related Occupations. You may recognize these categories because these are the office occupational classifications that you learned about yesterday. The United States Office of Education has a project underway in which they are developing a suggested curriculum guide of this nature in all eleven of the basic office occupations areas. Nine of them have been now completed. There are two yet to go. These guides are developed in this way purposely. They are not something you can pick up and teach out of. They are developed in such a way that you can adapt them to high school, junior college, or adult level programs. What does a legal stenographer, for example, do that sets her apart from a general stenographer? Or a medical stenographer? How do their activities differ? You can find out. The best source, of course, on the duties and responsibilities is the Dictionary of Occupational Titles. The information there is summarized in this suggested curricula guide for stenographic and related occupations.

Let us make you fully aware of what you have. This is a $175,000 research study, you understand. It is worth it. They have done yeoman duty. They were developed as a result of consultation with the best known names in business education in the United States. Here are some of them: Mary Ellen Oliviero, Teachers College, Columbia University; Dr. Frank Lanham, University of Michigan; Hazel Kellar, Portland, Oregon; Dean R. Malsbary, University of Connecticut; incidentally, he is on our AVA program in Dallas in the first week of December; Estelle Popham, Hunter College, New York; Dorothy Adams, New London, New Hampshire, who I regret to say very much is not the same Dorothy Adams as the vocational office education coordinator in Reagan High School here in Austin; Dr. Ray Price, University of Minnesota; Leonard J. Porter, the Business Education Editor for Prentice-Hall; Robert J. Ruegg, you all know him as playing around with machine shorthand; Lawrence A. Walsh, the Senior Editor of Gregg Division of McGraw-Hill, and so on. All of these people were involved in a consultant capacity.

You'll find a description of the different stenographic-secretarial occupations, the most common ones, which tells you exactly what these workers do.

You will find suggestions on the proper use of the guide, about the use of the Dictionary of Occupational Titles. You'll find job descriptions and occupational prerequisites. You'll find occupational analyses for each of these different occupations. You will find even more potent and directly useful to you, the curricula synopses for each different occupation. You will find a list of roughly 20 to 25 different office education units that pertain to all occupations in this stenographic, secretarial field. There is a list of these units. Further in here, you will find each of these units prepared in topical outline form. At the end of each of these units, you will find the best bibliography you have every found anywhere pertaining to that particular unit. Then in the back of the book, there is an additional general bibliography of other publications in this field that were not keyed in to any one particular unit.

Then, also, in the back you will find a bibliography of films and filmstrips available in this field. You will find a list of sources of free and inexpensive educational aids. I mentioned the general office education units. They apply to all of these occupations, not just one. Immediately following those, you will find a list of sepcialized office education units. These are the ones that separate the training of a legal stenographer from that of a medical stenographer or a general stenographer or a medical secretary. There are about 13 or 15 of these. Of course, no student studies all those. They just develop the ones that apply to their particular field. Following those are administrative units in the particular field for those who are interested in supervisory positions--office administration positions in the stenographic field. This is a tremendous publication, so it is worthwhile to take it out of the bookshelf in your institution or wherever it is and put it to work.

The organization of each of these suggested curriculum guides follows the same similar pattern. Now those first four were reproduced here in Texas and distributed to every one of the high school teacher-coordinators. Several were distributed to each junior college, a half dozen copies were sent to each of the teacher training institutions in business education. Now, in addition to those--these were not reproduced here in Texas, the information communications occupations--miscellaneous clerical occupations, electronic business data occupations; these are strictly the programmer analyst occupations, and the materials support occupations. I was delighted yesterday with Dr. Carter's comments about his doctorate degree. I showed him this comment, and he enjoyed it, so I am going to pass it on to you. Now I don't know this author, Sheldon Zalaznick, and I don't know a thing about him, but I do know that he wrote an article in Fortune, May 1968, "The MBA--Master of Business Administration, the Mind, the Myth, and the Method." And he is a character that I think I could get along with real well. He is quoted from this article stating that "if the work with students were to be judged by any more ambitious test, the graduate schools of business would be, with the possible exception of the graduate schools of education, the only professional schools of any size whose complete disappearance might not be a disaster, or even a serious loss, to the society they are presumed to serve."

Dr. Martin mentioned this morning this business of academic prestige. The fact that vocational education might not quite be "in," or as academically sound as the traditional academic programs, and that sometimes academic instructors on the campus tend to look down their noses a little bit on vocational teachers. The next time someone makes a comment about anything indicating a general nature to them, why don't you just ask them point blank--What academic discipline is the most highly regarded on the campus? Nine out of ten individuals are going to come up with the fact that the school of medicine or the school of law is the most academically respected. Do you know of anything that is more completely vocational than those two? It is ridiculous. The whole thing.

Let me throw a few of these transparencies on the board. These are the ones that disappeared yesterday. To a certain extent this is the same reference--I wasn't aware that Dr. Martin used these this morning--I was not aware that those were Dr. Colvin's figures, I understood that they were taken from the Texas Junior College Association. Take a look. Does it seem logical to place so much emphasis on semester length college course transfer requirements when only 4.8 percent of all the 18 year olds in Texas will eventually complete a baccalaureate degree. The last paragraph is not from some study out of antiquity. This is the graduating class of 1962, national figures. They are taken from another one of the USOE funded research studies. One year after high school graduation, 71% of all the girls who did not go on to college are employed in an office occupation, and 11% of all the boys. Actually, during the first year out of high school, the number of girls in offices tend to increase slightly, as the girls tend to gravitate into office occupations during the first year out of school, as did boys.

Interesting enough, those students who did not finish high school but found their first office employment in an office occupation, tended to leave the office occupations field during the first year out of school. They were not able to hold employment in office occupations. This percentage was reduced about as much as that one increased.

This should give you an idea of what you have when you have these USOE curriculum guides. The suggested number of hours is provided for each unit. You know, if a program were organized in terms of units, and students were involved six to eight hours per day in the classroom, rather than being involved in the semester hour basis, look how much more specifically you could place the student at his present level of accomplishment. If he has already had one year of high school typewriting, and can actually produce a certain rate, you would know exactly where to start him, what unit to start off with. Same way in business and mathematics, same way in bookkeeping skills, same in shorthand skills, and so on.

A quick look at the Accounting and Computing occupations. Please note the inclusion of the basic principles of data processing in the accounting and computing occupations curriculum. It should also be in the stenographic curriculum, shouldn't it? It should also be in general office, clerical office occupations, it should be in every office occupations program, shouldn't it--an introduction to Data Processing. Every office worker now needs to have a basic understanding, we are not making operators out of them. For typing and related occupations, information and communication, and all other office occupations training programs.

There are administrative positions here for somebody who could very reasonably get interested in the office occupations field. Program analysts, miscellaneous clerical supervisors. Do you realize how many of those clusters could be beautifully done in a one-year program, without the necessity of a full two-year program? I took the first four curriculum guides that we mentioned, and listed on these transparencies those units set up for stenographic, clerical, filing, bookkeeping and accounting occupations.

About 42% of all those units reoccur in other guides. So roughly about 40% of all those units in stenographic-secretarial also apply to clerical occupations. They also apply to bookkeeping-accounting occupations and also apply to typists occupations. I am sure if we went through the rest of them, we would find a repetition of some of those basic office education units.

I would like to commend our panel members, both days. They have done excellent jobs, as did Dr. Martin, and Dr. Carter, and other program speakers. But I would like to sway your attention particularly to the panel members who are teachers just as you are in your own classroom area. Time after time in these workshop conferences we have program presentations by various individuals, and often the materials presented are not directly applicable to your problems as teachers. The presentations we get the most benefit from are those from the other teachers. And you have done excellently.

You know, there is nothing; no, there is nothing that can take the place of pride in one's work. There is no greater satisfaction than the pride of accomplishment. Psychologists all agree that one of life's major emotions is tied to that statement. Everyone who has ever been successful has an abundance of pride in what they are doing. Professional men, businessmen, farmers, athletes; they all work hard if their goal of accomplishment is to be reached.

In the vocational office education programs of Texas, every graduate is living testimony to the pride of accomplishment in the classroom. Teachers in vocational office education classes in both the secondary and post-secondary levels are judged by the work of their graduates. There is no guessing at how successful teachers have been. There is no hiding behind any false curtains; there is no saying that well, I didn't teach that, somebody else did. Each of you is responsible for the occupational competency of your graduates. Vocational office education graduates either produce as a result of superior teaching, or they fail because of inferior teaching.

Vocational office education teachers are one of the segments of the educational complex who are accountable to their school administrators, to the students, and also to the employers who will hire graduates from the courses. Their dedication, their know-how, their knowledge, their loyalty, are all on the line every day, every hour the student is in school. To the business teacher, no greater pride of accomplishment can be achieved than to look at the success of their graduates in the field of business. Herbert Spencer once said that the aim of all education should should be action. Action it is for graduates for business programs. since they are judged not only by what they know, but what they can do. Elbert Hubbard made this statement many years ago: "Education is not a bequest, it is a conquest. The value of it comes not from having it, but from the work involved in obtaining it." Vocational office education students follow this procedure every day that they are in school. The office situation is part of their daily routine, both in their work and in the variety of their duty. Students in the vocational office education programs of Texas have already decided that they want to seek employment in a business position. Some college graduates shun private business. But VOE graduates seek affiliation and seek participation in the American private business.

One more comment before I close up, cease, and desist. My time is over. Don't get so involved in hardware and the hardware for your particular program that you lose sight of what you are trying to do. I thought of that this morning when someone commented about their lovely new IBM Selectric typewriters, and their desire for electric typewriters. It may amaze you, but many of you people take the National Business Education quarterly, you belong to the National Business Education Association just as I do. Their quarterly last spring reported the results of a big high-powered survey of 47 of the largest business firms in Seattle, Washington and vicinity, and 17 government bureaus in the same area. Did you notice them? They found that an astounding 27% of the typewriters in use were electrics. So don't get too involved in hardware. And remember that hardware salesmen are salesmen, they have a pitch. Now, I am not discounting them at all. We need them. They are worth their weight in gold. Many of the strides forward in business education are due to the hardware companies and the education aids which they have developed to be of assistance to you. Thank you.

EVALUATION

The closing activities for vocational office education instructors was the evaluation of the workshop by the participants.

Evaluation Procedures

Seventy-four registered workshop participants were given the instrument; out of this number, 47 were returned. This number represented 63% or slightly over half of the total forms distributed. The 47 forms executed represented evaluation of instructors, and technical-vocational directors. These participants were all in post-secondary schools.

The experience in teaching for the participants ranged from slightly less than one year to slightly over twenty years.

Complimentary Comments

The majority of the workshop participants were challenged and felt that they could do a better job in the vocational aspects of teaching at the local level.

The comments listed below describe the feelings of some conference participants:

> "well planned; needed; interesting; inspiring."
>
> "The workshop was particularly worthwhile."
>
> "This was the best conference so far. I have attended all of them."
>
> "The speakers were good, and sincere."
>
> "I have a better knowledge of my purpose in being an office occupations teacher."
>
> "Other personnel from my school should have attended."

Negative Comments

The comments listed are some expressions of conference participants:

> "Start later in the morning, quit earlier in the afternoon, and longer coffee breaks. This would give more time for exchange of ideas."
>
> "up-to-date standards"
>
> "needed to have divided into discussion groups"
>
> "Better temperature control and more comfortable chairs."

The majority of the participants stated the presentations were of great value to them in performing their teaching duties.